DOCUMENT RESUME

ED 340 104 EA 023 516

AUTHOR Hewitt, Geof, Comp.; And Others

TITLE Leading & Learning: A Portfolio of Change in Vermont

Schools, 1991.

INSTITUTION Governor's Institutes of Vermont, Stowe.

PUB DATE Sep 91

NOTE 60p.; For 1990 edition, see ED 326 926.

PUB TYPE Reports - Descriptive (141) -- Collected Works -

General (020)

EDRS PRICE MF01/PC03 Plus Postage.

DESCRIPTORS High Schools; Leadership; *School Based Management;

*School District Autonomy; *School Effectiveness;

School Organization; *School Restructuring

IDENTIFIERS Partnerships in Education; *Vermont

ABSTRACT

The Governor's Institutes of Vermont are summer programs for Vermont high school students. The students are chosen for their strong personal motivation and interest in art, science and technology, and international affairs. Coordinated with the Institutes, the Lead Learner program is designed to enhance teacher and school efforts in restructuring. These and other programs help to build a new vision of education: to define the needs of the 21st century learners, to transform schools so they can meet those needs, to promote standards of excellence in learning and leadership, and to create powerful partnerships between schools and communities. This document chronicles the events on Vermont's agenda for change from the personal and professional viewpoints of practitioners. Lead Learners tell what the institute's programs mean to them. Principals tell about their plans to work together on common issues. State leaders tell about the projects they lead and the challenge and promise they see. Five sections provide the following insights: (1) initiatives for change--active projects on Vermont's educational agenda; (2) institute reports--experiences of the 1991 Lead Learners; (3) images--personal reflection of educators; (4) great performances--success stories and innovative classroom ideas; and (5) profiles--reports from schools and communities working together for change. (RR)

Reproductions supplied by EDRS are the best that can be made



LEADING

LEARNING

A Portfolio of Change in Vermont Schools

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- C Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

"PERMISSION TO BE HODUCE THIS MATERIAL HAS BEEN GRANTED BY

77. (-240016)

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

GOVERNOR'S INSTITUTES of VERMONT

The Governor's Institutes of
Vermont are summer
programs for Vermont high
school students with strong
personal motivation and
interest in Art, Science and
Technology, and International
Affairs. Students are chosen
to study these subjects
intensely with professionals,
on the campuses of
Vermont colleges.



In 1991, the Governor's Institutes completed their ninth summer season, offering highly motivated high school students and educators engaging experiential opportunities to learn together on Vermont college campuses in the Arts, International Affairs, and in Science and Technology. Coordinated with the Institutes, the Lead Learner program is designed to enhance teacher and school efforts in restructuring. During the school year, the First Network supports and encourages Lead Learners and their school leaders to build upon each other's innovation and success.

All of these programs of the Governor's Institutes share fundamental goals with several other Vermont initiatives for change. All are helping to build a new vision of education: to define the needs of 21st Century learners, to transform schools so they can meet those needs, to promote standards of excellence in learning and leadership, and to create powerful partnerships between schools and communities.

The second edition of "Leading & Learning" continues to chronicle events on Vermont's agenda for change from the personal and professional viewpoints of practitioners. Lead Learners tell what the Institute's programs mean to them immediately following and one year after their initial experience, principals tell about their plans to work together on common issues, state leaders tell about the projects they lead and the challenge and promise they see in the future.

Major support for the 1991 programs of the Governor's Institutes of Vermont is provided by:

Barr Charitable Trust

Bay Foundation

Charles Gamper Fund of the Vermont Community Foundation

W. K. Kellogg Foundation

Josephine Bay Paul and C. Michael Paul Foundation

Vermont Council on the Arts

Vermont Department of Education

Windham Foundation

Generous corporate support is provided by:

Chittenden Bank

Gallagher, Flynn & Company

Green Mountain Power Corporation

Hemmings Motor News

Howard Bank

IBM Corporation

National Life of Vermont

New England Telephone

TJX Companies

Vermont National Bank

Vermont Yankee Nuclear Power Corporation

Local public support is provided by Vermont high schools and their enthusiastic leaders, who nominate and partially fund students and educators to participate in the Institutes.

Individual support through financial and volunteer efforts is provided by hundreds of Vermont community members, especially parents, and by the nearly 2000 highly motivated students who have attended the Governor's Institutes since 1982.



LEADING & LEARNING

A Portfolio of Change in Vermont Schools

SEPTEMBER 1991

INITIATIVES FOR CHANGE: active projects on Vermont's educational agenda	
What Is A 1991 "Lead Learner?"	
What Have We Discovered About Restructuring Schools?	
A Few Ideas About Restructuring	
The Vermont Common Core of Learning	
A Hopeful Vision for Education	
The First Network	
INSTITUTE REPORTS: experiences of the 1991 Lead Learners	
International Affairs: The Soviet Union	28
Science & Technology: Natural Science and Ecosystems	
Arts: The Creative Process	
IMAGES: personal reflections by educators	
Along the Road to Restructuring	33
Through the Eyes of an Otter	
Thoughts on Philosophy and Practice	
GREAT PERFORMANCES: success stories and innovative classroom ideas	
One Year Later	36
The Nichols Pond Project	40
The Last Two Weeks	
The New Haven River Project	46
Bringing Choice, Challenge, and Change to the Senior Year	48
PROFILES: reports from schools and communities working together for change	
Update on Restructuring at Otter Valley	49
Restructuring Special Services in the Cabot Middle School	
Leaders All: Champlain Valley Sets No Limits on Numbers	
About the Lead Learners and Authors	



page 23



page 30



page 31



page 47



What Is A 1991 "Lead Learner?"

ead Learners are a group of educators who are inspired by their own learning and professional growth and who want to lead others, inside and outside of classrooms, to inquire into, discover and express the highest values in education. They come to the Governor's Institutes in school teams to learn what it means to perform under very high expectations, and to develop innovative ideas to take back to their schools.

Leading... The program associates two kinds of activities with leadership, believing that changes in roles and responsibilities in schools must begin in the classroom. Instructional leadership activities help teachers think of themselves as guides to, rather than authorities on, knowledge. Traditional classroom roles position the teacher as an expert and the student as a relatively passive recipient who is usually exposed to knowledge rather than challenged by questions. Articles by Ken Martin on page 43 and by Helen Morrison on page 40 describe how inquiry can take center stage in the classroom. A statewide perspective on curriculum leadership is offered by Steven Gross on page 18.

As a second focus, the Lead Learner program introduces school leadership activities that highlight ideas in recent literature on educational change as well as to provide teachers with a broadened context for working within their schools. Lead Learners help their schools by taking positions on steering committees, by initiating study groups and inquiries with their communities, and by applying a widened perspective in strategies to enhance their educational philosophy. Articles by Julia Hewitt and David Book on page 48, Bruce Douglas on page 49, and Carlene Bellamy on page 50 speak from this point of view. A statewide report on restructuring is presented by Richard Tulikangas on page 6.

...&r Learning The program associates two more groups of activities with learning: teachers as learners, and students as co-producers of knowledge in reorganized learning environments. Teachers are at their best when they are excited about their own learning. Being a Lead Learner helps teachers to experience the excitement of learning again, and to think about what they need to be

Staff member Sally Murdock hands Lead Learner Bruce Douglas his work at the Institute on Science & Technology.





fulfilled as learners. Lead Learners examine their current habits in light of those experiences and establish new practices which extend the same conditions to their students. Lead Learners reflect on their teaching and use teaching to further their own learning. A statewide perspective on standards for Vermont educators and the future of professional development can be found on page 20 in Ken Bergstrom's interview of Susan Kuntz, the Chair of the Standards Board for Professional Educators.

At the Governor's Institutes programs, Lead Learners gain acce s to new knowledge and skills for teaching and they gain the time and opportunity to confer with other professionals who are developing capabilities to affect substantial classroom and school change. The Lead Learner program encourages educators to reorganize learning environments to:

- Infuse real-world learning and work,
- Place more responsibility on students to work independently and collaboratively,
- Use time and resources differently to create and sustain these environments,
- Design instructional alternatives to accommodate a range of abilities and talents,
- Reorganize instruction so that students experience more in-depth learning and engage in higher-order thinking and learning tasks.

The ideas of the Lead Learners and their reflections on Vermont's goals for education are discussed further on page 12.

This 1991 edition of "Leading & Learning" also contains: first-hand reports on the experience of living and learning alongside highly motivated students at the Institutes, personal reactions to this year's events by teachers, ideas for new courses and



Executive Director
David Gibson leads
a simulation at the
Lead Learner's
conference prior to
the Institutes.

new school and community activities, news from established projects, and a review of the impact of the Lead Learner program one year after its inception.

We have been busy in Vermont! It is an exciting time to be a part of education, and Vermont is leading and learning from its innovative efforts.

David Gibson

What Have We Discovered About Restructuring Schools?

A year and a half after the state awarded initial Challenge Grants to "Reinvent Vermont Schools for Very High Performance" we have a better understanding of the fundamental conditions needed for school change

In early 1990 and 1991 eleven school systems received initial grants from \$10,000 to \$40,000 as incentives and partial funding to carry out their plans for change. We've learned that their efforts ride on waves of exhibitantion and frustration, produce a great number of team meet-

To act upon their vision, schools need to articulate a concise set of goals and to develop a continuing strategic planning process for prioritizing action.

ings, and uncover a broad range of interwoven issues. What these schools have learned supports author Jane David's identification (in the May 1991 issue of Educational Leadership) of the conditions necessary for school change – time, knowledge, authority, and flexibility.

Time

Each school has a team responsible for guiding the restructuring process. These steering committees meet regularly with the local school

board, and with the community at large. In addition to the steering committees, most schools have established special working groups, teams of teachers, and community liaisons to develop and manage new ideas. These groups need time to meet with each other, with their peers within the school, and with the school's community. Ultimately, as school wide change affects more and more elements of the system, school staffs need more time and opportunities to collaboratively plan and act.

Some specific examples from the Challenge
Grant schools • Danville School reports that the
"team process is sometimes slower, but we believe
it is the most effective vehicle for systemic change."
• Westminster Elementary wants meetings to coor-

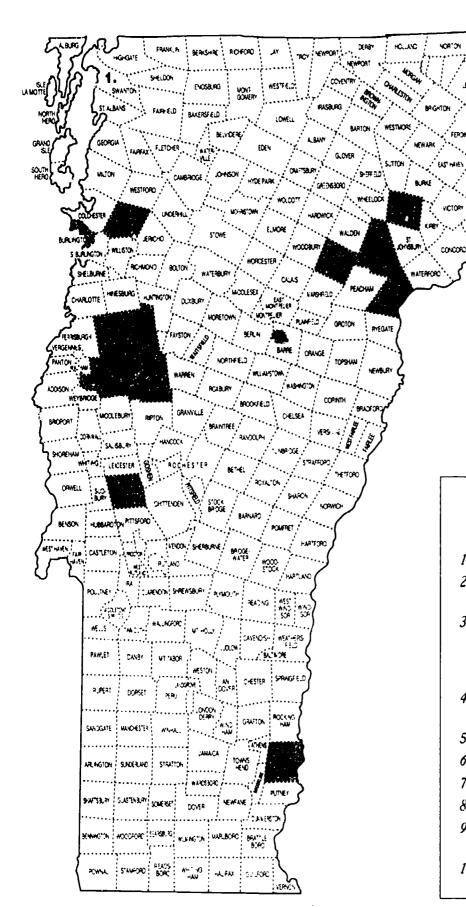
- dinate more fully with local social service agencies such as Southeast Vermont Community Action.
- Mount Abraham teachers introduced a special

week of learning – a Bicentennial Symposium – which required time consuming meetings to restructure the school day, class groups, and teaching assignments. • Yearlong interdisciplinary team structures have been developed at several schools like Swanton Elementary Schools and at Cabot School. • Administrators and guidance staff from Burlington Technical Center and the Essex Junction Area Technical Center meet with the ten schools who send them students, to jointly work to eliminate the general track. • In Barnet, steering committee meetings focus on developing resource lists and arranging for volunteers for their "Common Roots" food and environment project which is central to the school's restructuring efforts.

These time consuming meetings for planning, managing, and assessing innovative programs are needed to bring about Vermont's educational reforms.

The early results in these schools are the products of more volunteer rather than paid time. At Otter Valley Union High School, for example, conferences and large group forums for establishing local goals involve a large number of people. Smaller working groups then carry out the will of the whole But each school is also mapping out, if not already putting in place, structures that will ensure that ample planning and communication time are built into the system. The Elementary Schools of Addison Northeast Supervisory Union used minigrants to support collaborative work on schoolwide schedules that would include greater common planning time. Spaulding Middle School reworked the daily schedule to provide team planning time. Cabot School changed the district calendar to create blocks of two or three days for staff development, rearranging the separate days spread throughout the year common in most schools. The staff of the Neshobe School identified and implemented four different staffing and schedule changes to increase team planning opportunities.

These schools have learned that ample structured meeting time is essential, not only because the changes underway are complex and are needed now, but because professionals need time for maintaining regular contact with their peers and to



The Challenge Grant Schools

- 1. Swanton Schools (K-6)
- 2. Burlington | Essex Vocational-Technical Centers (9-12)
- 3. Addison Northeast Supervisory Union (K-12), Bristol, Lincoln, New Haven, Monkton, Starksboro
- 4. Otter Valley Union High School (7-12); Neshobe School (K-6)
- 5. Lyndon Schools (K-8)
- 6. Danville Schools (K-12)
- 7. Cabot School (K-12)
- 8. Barnet Schoo! (K-8)
- 9. Spaulding Graded School (6-8), Barre City
- 10 Westminster Schools (K-6)

communicate effectively with the entire school and community.

Knowledge

Foremost is vision. Vision, after all, is a statement of collective knowledge about what a school can and should be. Schools that have it are moving forward. Those that don't are getting it. The key

An atmosphere
which supports change
must be flexible
to accommodate the
diverse levels of
readiness for change.

elements of developing vision in Vermont restructuring schools seem to be bread school and community input, a central focus on learners, and a clear sense of what is possible. Vision supplies a picture of the whole and gives educators the permission needed to accentuate the positive, eliminate the irrelevant, and create what's missing.

To act upon their vision, schools need to articulate a

concise set of goals and to develop a continuing strategic planning process for prioritizing action. Transforming schools also need to create new ways to assess and measure their progress. Action research strategies are being adopted by the Challenge Grant schools as a part of their ongoing evaluation of performance

Otter Valley offers an example of the goal setting-planning-evaluation cycle in action. In May, the school's restructuring team surveyed the school community. In the survey the community's mission and goals were restated along with things that had been done, or were in progress, to accomplish each goal. Room was left at the bottom for people to add anything they felt should be included. The last page of the survey outlined targets for future years. Teachers were asked to rank their top five priorities from each of the goal areas, and then to specify which year they wanted to see the target reached. For example, Otter Valley's first goal is to create an atmosphere for student centered teaching and learning. The school celebrates the fact that its seventh grade is heterogeneous and grouped thematically. The school offered summer grants to teachers to plan units, and saw an increase in the

use of cooperative group techniques in classes. Among the school's targets are ideas for moving these accomplishments up to other grades. Teachers, community members, and anyone reading the survey can tell that the next five years holds promise for many more thematic units, multiyear teacher teams, schoolwide expositions, and much more. The school has a vision. Its goals are clearly stated and being acted upon. Progress is being assessed and accomplishments are celebrated. The school and community are jointly planning next steps in a long term framework.

Beyond the knowledge brought by vision, goals, and the strategic planning processes of change, the Challenge Grant schools are helping to develop knowledge in areas such as partnerships with parents and the community.

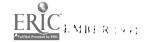
• Swanton is piloting a summer lab school – a learning and fur. festival - as a means for broad community involvement as well as a way to experiment with new teaching and learning strategies and structures. They have also established an active community council called the Forum on Families and Youth to work with the school and a local business roundtable as integral partners in carrying out school restructuring goals. • Staff organizers that facilitate community relations and build capacity for using new local resources are common to several of the Challenge Grant schools. • Lyndon Town built such a position after visiting and learning from the Danville School. Other schools have built staff structures using community volunteers to share responsibility. • The Neshobe School designed a new extended day kindergarten. • Cabet maintains its close relations with the town's famous creamery. • The Barner School works with Foodworks, luc. to create a comprehensive outline for community involvement at every grade level (K-8) to support projects focussed on food and the environment. • Westminster Elementary has a vision of minischools which integrate learning opportunities with families and community resources. To address their vision a School/Community Club has formed around the idea of Saturday schooling for families. "Let's Talk" community forums invite input on the school's direction.

The knowledge gained from these new programs



Reinventing Vermont Schools for Very High Performance: Challenge Grant Schools

SCHOOL(S) DISTRICT AND CHALLENGE GRANT AWARD	NUMBER AND GRADE LEVEL OF STUDENTS	NUMBER OF TEACHERS	KEY ELEMENTS / GOALS OF RESTRUCTURING PLAN
Addison, NE Sup. Union (Bristol, Starksboro, Lincoln, Monkton, Beeman, New Haven) \$10,000	1727 K-12 (5 elem , 1 HS)	87	District level leadership for and commitment to change, shared decision-making and community involvement, student participation in decision-making, comprehensive student assessment, district includes Mt. Abraham UHS, alternative options for students, heterogeneo grouping, interdisciplinary teaming, Beeman Elem. (New Haven), Robinson School (Starksboro), Lincoln Elem., Monkton Elem., and Bristol Elem.—multiage groupings at each, models of special and regular ed. integration, and alternative elementary schedules.
Burlington & Essex Technical Centers \$20,000	Essex 289 Burl. 301 10-12	Essex 30 Burlington31	Working with sending schools to eliminate tracking, team teaching and applied curricula with academic and vocational teachers; summer center academy for non-techted students/placement in area businesses; program alternatives for at-risk students; exploring better joint use of Chittenden County techned resource. partnership with UVM for staff development
Cabot School \$30,000	246 K-12	22	Scheduling redesign; interdisciplinary team teaching at all levels, full integration of all ability levels, partnerships with Cabot Creamery for applied learning; priticulate high performance standards for parent involvement, shared leadership and student input, portfolio student assessments and new "senior projects" approach, partnership with St. Michael's College for stadevelopment, new learning technologies
Danville Village School \$10,000	384 K-12	20	Community outreach and involvement, middle school concept in grades 7 & 8, teacher internships in business for curriculum development, schedule redesign at all levels for commo planning; portfolio assessments; collaborative decision-making; thematic interdisciplinary units
Otter Valley UHS, Brandon \$10,000	690 7-12	26	Interdisciplinary teaching, community involvement in goal-setting/outcomes definition; lifelon learning opportunities for adults and pre-schoolers; alternatives for at-risk students; committee framework for planning and implementation of restricturing; administrative team model for school leadership, heterogeneous grouping; articulation of necessary skills mastery for graduation
Westminster Eiem. Schools \$40,000	373 K-6	18	Mini-school approach to families of learners; community outreach and involvement; flexible scheduling/common planning time; planning for coordination of social services/individual case management for students at-risk; multiage grouping at Primary Program
Barnet School \$15,000	233 K-8	10	School-wide interdisciplinary thematic core for restructuring curriculum teaching and learning process; themes of food, agriculture, and the environment with sequential grade level development; partnership with Foodworks Inc. to train staff, implement design; integration of community resources
Lyndon Town School \$10,000	700 K-8	10	Community outreach and involvement: community room as focal point for involvement in new school; integration of special ed students; community-based service and training for students; teacher advisor program for middle grades; three instructional units for common planning time/team teaching
Neshobe School, Brandon \$20,000	472 K-6		Shared leadership model; schedule redesign for common planning/team teaching; community involvement in goal-setting, multiage grouping; portfolio assessment approaches; integration of special ed /teaming of special and regular teachers; cooperative learning; partnering with UVM and Castleton for teacher prep_and staff development
Spaulding Middle School, Barre 510.000	285 6-8	21	Interdisciplinary thematic units, student and teacher directed behavior management system; house structure for grouping students and teachers, schedule redesign, collaborative decision-making, portfolio assessment approaches community involvement
Swanton Elem Schools	678 K-6		Multiage grouping, summer lab school design to experiment with leaching and learning innovations, staff development, parent and community involvement; team teaching, collaborative planning and goal-setting with families



will help shape how schools and communities will interact in the future.

We are also learning that school staffs need to learn continuously. The Challenge Grant schools have created an insatiable need for new professional development. Teachers participate in programs like the School Development Institutes, the Governor's Institutes, the Elementary and Secondary Summer Institutes, and in content specific courses and school-designed courses like those offered by Saint

Educators need to continuously focus new methods, arrangements, and structures on articulating high performance outcomes.

Michael's Coll. 3e and the University of Vermont. For example, one credit courses have been delivered at the school site for greater authenticity in course content and greater participation by staff. Such courses strengthen team building and encourage growth of a unified local vision of education. The results also lead to changes in other areas of school decision-making such as scheduling and the use of school resources.

Other organizational partners also contribute significantly to knowledge of school change and suggest new paradigms for operating schools. The Vermont Middle Grades Initiative is leaving its mark on the Challenge Grant schools that serve those grades as well as several other communities. The Vermont Chamber of Commerce Education Committee has sponsored seminars utilizing business expertise in strategic planning and marketing. The Vermont Educational Partnership Project also supports the Challenge Grant schools through seminars and assists with developing links to the business community. Project SOLVE, a joint project with Johnson State College, for example, placed several Danville teachers with area businesses in the summer to develop classroom applications.

On a broader scale the Regional Laboratory for Educational Improvement in Andover, Massachusetts, is helping schools to gather and use their own data to plan and manage change, and is creating networks of schools who are developing as centers of inquiry.

New programs are also emerging to help meet

the demand for high quality, equitable, professional development. The Professional Standards Board, for example, is working with colleges and other professional development providers to establish a Professional Development Consortium to meet local needs and to make better use of Vermont's educational resources for school change.

Our knowledge about school change and about the art and science of teaching in Vermont, is increasing. The experience of the Challenge Grant schools is proving to be a key source of information in Vermont's quest for knowledge.

Authority

Authority is being redefined in reinventing schools. As decisions move closer to those responsible for implementing them, new forms of authority are emerging which require group consultation and shared decision-making. In addition, schools are recognizing the need to engage their communities in the process of defining student outcomes and helping to deliver on these outcomes. The need for continual and consistent communication inside and outside of schools has therefore increased significantly.

In the struggle to redefine authority, some conflict is inevitable. Significant changes create conflict as individuals are forced to work out new roles and relationships. Group roles also need to be reassessed as restructuring committees, school boards, curriculum task forces, advisory boards, and teams of teachers find that their work intersects and overlaps, sometimes uncomfortably.

Although it is complex and messy, the redefinition of authority is a fundamental piece of the restructuring puzzle. Several schools have staked out territory in this area. At Otter Valley the role of school principal has been redefined as a three person leadership team. The team concept evolved out of open discussions among teachers, the school board, and the superintendent as a way to share important responsibilities and to apply experience and expertise that existed within the school.

Just down the road at the Neshobe School, an elementary school that sends students to Otter Valley, a different approach to shared leadership is evolving. A leadership team consisting of the prin-



cipal, assistant principal, and eight teachers will share a wide range of schoolwide responsibilities.

Some schools also recognize that shared responsibility ultimately must include students. At Cabot a student advisory group on restructuring meets regularly with the principal. Several Otter Valley students participate with teachers and community members on restructuring committees. At the Spaulding Middle School a new behavior management system places significantly greater responsibility with students for managing their own behavior. Teachers at Spaulding serve on a rotating basis as advisors in this system, which has resulted in far fewer discipline referrals.

The picture of authority is complicated by elements that are out of the individual school's control. School budgets in hard working and sincere districts are still being defeated. New and untried processes of teacher relicensing are being formed. Reports are issued by business leaders, researchers, regional laboratories, and national councils, recommending action and suggesting areas for consideration. Responsibilities which formally rested in one place are soon to be located elsewhere. And as always, staff changes, especially in leadership, present new challenges. Who is responsible for change and how will needed changes be brought about, are questions under scrutiny as Vermont watches the Challenge Grant schools.

Flexibility

Underlying the other fundamental conditions necessary for school change is flexibility. Real change can be painful and some people are extremely reluctant to risk it. So an atmosphere which supports change must be flexible to accommodate the diverse levels of readiness for change. Individual schools are placing more value on time, rewards, training, and recognition of professionals who practice teaching as both a leading and learning activity.

Each change causes ripples in the school organization. Effects in one area often have implications on other parts of the system. For example, teaching in teams is valued for what it brings to the teaching process. But in order to form teams, schools run up against issues of teacher evaluation. How should an

English teacher be evaluated for his or her role in the science sections of a creatively designed pond study program? Teams run up against issues of student assessment. Are there more flexible, more authentic forms of evaluation than tests and grades? Individuals run up against issues of certification, curriculum planning, and responsibility for their future professional development. Do current certification regulations offer the rigor and flexibility that a high school Science teacher needs to be encouraged to also teach Mathematics, and History, and Literature, and Art?

We are learning that flexible and supportive systems are valued and meaningful. We are beginning to see ways to restructure not only schools, but districts, contracts, services, regulations, higher education, school improvement programs, and special education – flexibly as well as concurrently with the needs of the profession.

Finally, a critical correlate to flexibility is accountability for results. While educators need flexible systems to create new forms of teaching and learning, educators also need to continuously focus those new methods, arrangements, and structures on articulating high performance outcomes. This challenge is at the heart of our work and sets the context for what we are learning about restructuring from the Challenge Grant schools.

Rich Tulikangas



A Few Ideas About Restructuring

The educational status quo, in relation to curriculum, structure, educators, and communities, underestimates human potential. But there are promising signs that we know what we need to do to fix things.

ore often than not, the status quo in schools sets up roadblocks for innovation. • The curriculum is primarily driven by textbooks and the traditional demands of disciplines rather than the needs of learner: for the next century. • The structure is driven by the clock and calendar rather than the tasks of learning, and it assumes that all students should study the same wide range and narrow depth of subjects in the same order everyday, moving from work area to work area at the sound of bells. • Educators are expected to work within those same rigid boundaries, to shift activities every f w minutes, and to work primarily alone, transmitting expert knowledge which is only certifiable in certain disciplines. • Finally, the relationship between schools and communities falls into a narrow band in which espoused support of schools and the reality of action do not always meet. This occurs, for example, when local service industry employers hire

All of these issues need to be addressed if we are going to achieve Vermont's Goals for Education. We asked the 1991 Lead Learners for their views about those goals.

students without checking their status at school,

hire graduates without asking for a transcript or for

evidence of their skills, knowledge, and attitudes.

The changes the Lead Learners advocate reflect discussions and action plans already underway at several Vermont high schools. Their thoughts represent the direction of schools wanting to serve as centers of inquiry for communities of learners.

1. What should be the common core of experience for all students?

"The common core of a student's experience should be nearly identical to the common core of the teacher's experience, and should be common to the experience of an administrator as well: inquiry, a common acknowledgment that we all have questions and need the tools for finding answers." — Geof Hewitt

Students need an experiential and inquirydriven curriculum that is meaningful to their lives. The core of experiences should be designed so students actively learn and experience growth each day, and see that same kind of growth happening in their teachers as well as their classmates. The student's own quest for knowledge and understanding should be honored explicitly and publicly. At the same time, to meet the needs of community and society, mentors and teachers should take responsibility for guiding the implicit content of the student's quest. Themes for inquiry should persist throughout the year, showing a recurrent attention to central questions shared by adults and given as challenges to students. Students should experience daily community building, perhaps starting each day with a mind expanding question or dramatic moment. And we should ensure that the experience of school not shortchange one student with curricular dreams of Camelot. These qualities in a curriculum can help schools achieve higher levels of student engagement and better develop the performance capacities of students' minds, bodies, and

"In an ideally restructured school, we would learn from people who live, and love, and are what they do."

- Helen Morrison

"I always knew this intellectually, but not until I was part of the Governor's Institute on the Arts did I really come to believe that we as teachers need to be actively involved writers, scientists, and artists." — Julia Hewitt

Students should see educators learning every day. Educators should set the tone, model the behaviors, and perform and evaluate themselves by asking for input from their students. Faculty projects, representing the learning interests and commitments of the faculty should be actively pursued during the school d—and where appropriate, the products of such effort should be exhibited alongside student work. Faculty should act as model learners whose own inquiry, interest, and dedication to learning help students create and evaluate themselves in the light of adult standards. Standards from the adult world could also enter a student's experience if schools would involve at least one key member of the community outside



the school as a role model or mentor in a student's learning.

"If students experience life while in school, they'll see learning as a lifelong adventure." – Ken Delorge

The daily core experience for students should include choices and independent paths, guided and reviewed by close personal advisors who "live with" — their students. The school should be a home base from which to move; the key word is mobility. The day should include time for content, time to talk about what it means, time for unstructured doing and thinking, and it should be structured for a close fit with the

energy level of a student's day. If students become involved with some of the planning and structure of their day, they may tell schools to use a variety of challenges, concentrate on what is truly important, keep the expectations very high, and give unwavering personal support for ultimate success. If cducators followed such advice, they would be guides to resources for students who are gaining skills, knowledge, and attitudes for lifelong learning.

"We are never going to teach all the same things to the same kids." - Ken Martin

Keep it simple. Schools should be centers of intrinsic motivation, which they can be, if they reward and support it. Texts should not be used as crutches for courses. Instead, multiple sources should be employed in the service of inquiry. Students need to work on real things that really matter in the adult world. Exemplary student and teacher work should be good enough to be shelved in the library for reference by others.

"We need to create more opportunities for public performance, for the showing of our products, our arts, our projects, our dreams. I am absolutely convinced that all students must experience the thrill of seeing their pieces appear from time to time in a constantly changing gallery of our school community." — Julia Hewitt

Some of the changes needed do not have to wait for radical realignments of the structure, roles, and

Vermont Goals for Education:

Goal 1: Vermonters will see to it that every child becomes a competent, caring, productive, responsible individual and citizen who is committed to continued learning throughout life.

Goal 2: Vermonters will restructure their schools to support very high performance for all students.

Goal 3: Vermonters will attract, support and develop the most effective teachers and school leaders in the nation.

Goal 4: Vermont parents, educators, students, and other citizens will create powerful partnerships to support teaching and learning in every community.

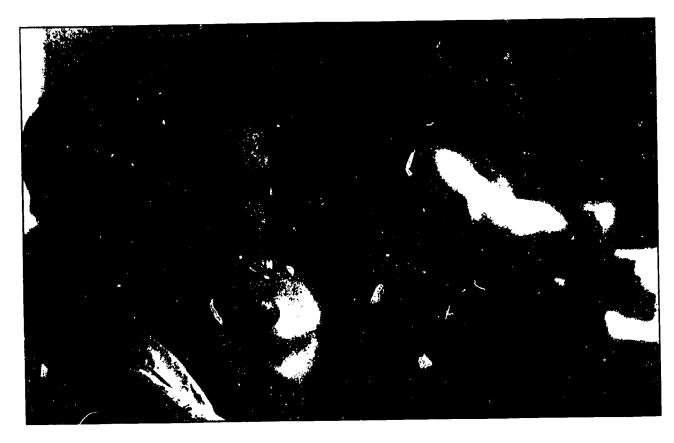
responsibilities of educators. For example, move outside the building. Conduct a weeklong multidisciplinary symposium on a rich theme. Then extend it or try more than one theme per year. Have a faculty member shadow a student for a whole day and report their findings at a staff meeting. Invent ways for teachers and students to work together toward common goals and to see each other in new circumstances. Have students identify areas of their own expertise which they can teach to others, then have faculty members coach them in those roles. Contact innovative people at other restructuring schools for ideas.

"Every student should be promoted with a feeling of accomplishment." – Maureen Cunningham

Measuring those feelings in students is not impossible. It requires consistent and valued use of student self-reports and self-evaluations as primary elements in school assessment practices. Students and parents will see that schools highly value these elements only when risk taking and mutual social acceptance, as well as resolution of conflicts, are commonplace and generated collaboratively between young people and educators.

"The grading system snould be diagnostic and give the student a clear idea as to how to proceed to master the lesson at hand. It should be as clear to a student when they have learned to multiply decimals as it was when they learned to ride a bike." — Bruce Douglas





Staff member Bill Conley leads a discussion at the Lead Learner conference.

Classroom assessments should build confidence and competence, and should record growth and document accomplishments by students. They should also be two-way streets so that teachers learn as much about their performance as students do about theirs. Criteria for exemplary performances which are required for promotion and graduation should be sent home in understandable, concrete terms and with examples for emulation and practice. Diplomas might list the important contributions made by the student, much as year-books do today for extracurricular activities, but with even more specificity: diplomas-as-resumes.

"The real curriculum is what happened, and we don't pay enough attention to that." - Donald Graves

2. What structures are needed to accomplish the core curriculum?

"In the olden days, in order to be a blacksmith you worked for years. Then you would bring your best piece to the master. If your piece was of high enough quality, you were ready to end your apprenticeship."

- Bruce Douglas

To restructure schools, at least to a certain extent, we have to restructure society. Changing community and family expectations must go hand in hand with changing schools. In order to do this, schools will need to spend more time developing their relationships with the community and less on some of the things they do now. But the enormity of this task should not deter us from immediate steps which can be taken within each school.

"First, we need the 'structure' of FLEXIBILITY." – Maureen Cunningham

"A treaty must be struck between the need for learning by investigation and the perceived need to cover a certain amount of content by June."

- Bruce Douglas

Schools need flexible daily and monthly schedules, flexible work group arrangements, and flexible processes of assessing individual needs and programs – for both students and professionals in the school. Maximum flexibility would allow us to teach very differently. Students could move from one intensive study to another. Enriching and challenging activities could be led by people who love



17

what they do. Performances could abound, by students, by teachers and other professionals, and by guests from outside the community. Teachers could help process individual and group experiences and lead what is happening in the course of these focused studies by adjusting frameworks and questions to point to new "core area" — subjects. To do this well, schools need teachers who are willing to work in teams, who are willing to learn from students, who take risks in their own learning, and who readily contract outside resources to expand both their own and their students' learning.

"Schools need to provide ways for everyone to do something very well every day." – Julia Hewitt

"All students – good and bad – need affirmation and nurturing." – Bruce Douglas

Whatever the structure, students should be allowed to progress individually and in multiage groups whenever possible. For example, students could progress within the curriculum and be promoted from different curriculum levels on the basis of well defined portfolio and exhibition requirements rather than textbook completion. Students could show what they know in a variety of useful, entertaining, and definitive ways, not just by taking tests.

"The school day needs to become sane, comfortable, and focused. Everyone must be involved in something they find a way to commit to. Everyone needs free time built into the day to regroup, to think well, to be alone for a bit." – Julia Hewitt

Students should spend their school day utilizing resources – human, technical, personal, social resources – and choosing among performance options for exhibiting their knowledge. Bells should not violate the atmosphere. Forty-four minute periods should not drive everything all of the time. Instead, the school year should have variety, as should the arrangements, groupings and coursework. Time off of school should be flexible, with real community action built into that time.

The two most often mentioned structural needs of teachers are for planning and professional development time, and smaller, more flexible class arrangements. Failing to address these structural

deficiencies exacerbates a problem that is at the heart of the matter. Personal interactions – between teachers and students, teachers and teachers, and students and students – are currently being compromised. Structures compromise relationships when clocks and calendars rather than exemplary performances drive the school day, when texts and facts rather than inquiry drive the content, and when summative grades and report cards rather than intrinsic rewards and authentic measures drive assessment. Schools should instead make relationships sacred to learner-cent-red structures.

3. What do professional educators need to be the best they can be?

"One of the things I need in order to find the artist, scientist and diplomat in myself – and to be the best educator I can be – is time at school to do my own multi-dimensional learning." – Helen Morrison

"We also need time, space, and the permission to det rmine for ourselves what we most need in order to get jobs done." – Julia Hewitt

Educators need to be active excited learners. They need to be engaged in their own learning, and sharing that learning with peers, so they can transfer that excitement to students daily. As a context for their learning, educators need continual professional development, and organizational roles that male best use of their talents.

Professional development is needed in colleagueship: team building, risk-taking, group process, communication, coaching others, collaboration, and in personal and organizational change processes.

Recognition is needed to encourage teachers who take the risks of innovation, who ply through uncharted ideas and projects with little more resources than their wit and instinct. Schools also need to recognize educators who are positive group members, and who take pains to reach into the community and to make significant contact with parents.

Finally, schools should reward the commitment and leadership interests of educators who would eagerly take up additional responsibility in exchange for greater autors.



"I'd like to see faculty meetings and department meetings which are more than just slogging through business items." – Bill Conley

Educators need other professionals around them whose own work and excitement for learning is infectious. Meetings should build collegiality, with educators sharing ideas, showcasing successes and failures, and providing each other with professional and personal learning occasions. These aspects have to be planned, and structured to occur at least as regularly as the nuts and bolts issues that normally take up staff time. Professionals also need to teach in areas that stretch them to pose questions they cannot answer. And they need to work in noncompetitive, integrative classroom and school frameworks that allow them to make flexible, mutual agreements with other professionals. An absence of these elements leads some teachers to become dropouts. One teacher writes, "It has been difficult for me this year to see faculty members who are one dimensional, still secure in the knowledge that they have a 'job' regardless of declining enrollment because of their double digit years of service. Teaching isn't just a job. It's a calling and lifestyle."

"It is at least a partial truth that teachers teach as they were taught." - Bruce Douglas

Higher education pedagogy needs to change simultaneously with precollegiate education. Experienced teachers in the field have a vital role to play in educating future teachers. Acting as mentors for beginning teachers should be a regular activity—which should occur in an environment where students, experienced mentors, and beginning teachers all share a mutual search for knowledge and self-fulfillment

4. What should be the relationship of schools to communities?

"We must create a sense of trust and faith."

– Ken Delorge

"Communities need to see results, and they need to help design what those results are going to be."

- Helen Morrison

Schools should be places that feed creativity and excitement into communities. More important, a

school should guarantee that every family in its community is made aware of its vital role in learning and is helped to achieve its potential in that role. For example, schools can offer workshops in parenting skills like conflict resolution, or using family experiences as learning opportunities. Educators can visit students where they live to gather information and make close personal connections. Schools help create communities.

"The community will come in if the school is a community." – Maureen Cunningham

"The school should be a part of and a reflection of the greater community...a place where a student can learn by experience what his or her role in society might be."

— Bruce Douglas

The school community should state among its goals that it intends to bring the community in by drawing upon community expertise, and sending learners out to learn by doing and serving. By doing, so, the range of options for responding to individual learners' needs is greatly expanded, gains are directly felt by individual learners, their families and other community members, and the symbiotic relationship between school and community is nurtured.

"Schools need classrooms outside the walls of the school building. Communities need to honor the attempts of teachers and students to know each other better through frequent forays into the community. Partnerships which train community members and leaders and school members to work cooperatively build the attitude that schools and communities vitally need each other."

— Bill Conley

The community should be a gigantic annex for its school. Communities should open new doors to student service and learning, offer scholarships to students for additional study while still in precollege years and provide ample and broadly connected community resources to support the work of education. Schools should hold a business class at the bank branch, a health class at the hospital, a life skills mathematics class at the grocery store.

In turn, students should be visible, working contributing members of the community. The



17

school too, can be a resource to the town. At town meeting, a student committee can present its findings concerning community issues. The school facilities can house the year-round community arts and learning programs.

Beyond the relationship between communities and their schools lie the state and nation. Communities and schools that are taking risks need recognition and praise, and they need continued financial and technical assistance. One educator writes: "I'm from a town that is pretty insular, but loves its school. The town has been willing to take risks in learning and structure, but is now backing off — partly, I think, because it womes whether its kids are learning what they need for jobs, or feel well-prepared for college. There is nervousness arising where there has been ok-we'll-try-it support."

The state and national atmosphere for significant educational change continues to be open and supportive. But there is much work to do in school finance and governance, in locally based professional development, in collective bargaining and contracts, in program and school approval processes, and much more.

Incentive programs available in Vermont make a start in the right direction, but schools undergoing this magnitude of change need time as well as resources to develop community involvement for lasting and significant change. Public and private dollars and expertise will be needed for some time yet, before we can say, "Here is a school that is completely different – and highly successful at it. Look at what its graduates are doing." – Communities and schools are watching carefully and measuring their risks and rewards against the currents of change. The waters are choppy, the winds are high, and innovative educators, who are used to fighting upstream, are staying alert. So far, the voyage looks promising.

David Gibson & the 1991 Lead Learners & Staff

History 401: The American Experience
Math 301: Algebra 2

English 201: British Authors

Risk-Taking 101:

A Multidimensional Experience

Students learn ways in which they can stretch themselves and find intrinsic motivation in any intellectual - artistic - spiritual endeavor. The qualities inherent in balancing external "must do's" with internal "I want to's" will be dissected and explored through practices of the humanities, science and technology, the art of mathematics, and the physics of art. Students will be evaluated by applause, real-world tests, and feeling good about themselves and the progress they have made.

The Vermont Common Core of Learning

Statewide conversations between educators and communities build consensus for a new vision of education for everyone: a Learner's Bill of Rights.

ver the past several months 40 Vermont teachers, administrators, students, parents, business professionals, higher education faculty and Vermont Department of Education people have been working to build a new vision for our state's education. During the next two years the Department of Education hopes to engage thousands of Vermonters, from every part of the state and from every background, in a dynamic conver-

The goal of the
Common Core is to
provide a series of
highly compelling
interlocking strategies
that yield many right
answers locally.

sation that will define: The needs of 21st Century learners; successful instructional practices and school-community relationships; models of successful programs; ways to build a community's educational vision; and likely patterns for organizing education from preschool to adult education.

By working with great numbers of Vermonters and by a thorough examination of the best national and interna-

tional standards, we hope to build the maximum possible consensus. We must aim high because the future will demand excellent preparation and continual learning. We consider the Common Core to be a Learner's Bill of Rights because it is a vision for everyone. Once we define the needs of learners, we must assure that everyone faces the future well equipped. We would not send a child out in a snowstorm without a warm coat. Likewise, we cannot send young people out into the world without the background for success. Schools alone cannot achieve this goal. It will clearly take all Vermonters to make this a reality.

How are we going to do this?

We feel that it is vital to start this process by going to the people of our state with a blank piece of paper. We want to know their thoughts first, not their reactions to our thoughts Therefore, the

Common Core committee focus forums usually involve 30 to 60 people who are asked three openended questions during a three hour period. Facilitators work with groups of about eight participants while a site director makes sure that everything runs smoothly. The three questions we ask are:

- 1. What skills, knowledge and attitudes will learners need to be successful in the 21st Century?
- 2. What programs exist now that are in harmony with your vision?
- 3. What can schools, communities, and businesses together do today that would make a difference?

Participants have had two main reactions to these forums. First, they are glad to have been part of the process at an early stage. Second, they want to stay involved. We have a commitment to keep interested Vermonters aware of the Common Core's progress and to find ways for them to participate.

Because our task is complex, we have organized the larger committee into task groups. By concentrating on research, outreach, future forums, writing, coordination, and the use of technology, we hope to expand the depth and breadth of our work over the months ahead.

What will our work produce?

We believe that Vermonters will care about and act on the Common Core of Learning only to the extent that they have had a hand in its design. Of equal importance, we are not out to create a series of right answers that should be imposed upon local schools. It is simply not appropriate for a state department of Education to prescribe highly detailed learning plans. We need to honor the excellent work in curriculum done by teachers and administrators around the state. The goal of the Common Core is to provide a series of highly compelling interlocking strategies that yield many right answers locally.

Here are the five products of the Common Core of Learning, set to be presented in a series of reports starting in the winter of 1991.

1. Needs for Vermont learners for the 21st Century. In this first report we will share Vermonters' vision of the kinds of skills, abilities, and attitudes that we all will need to do well in the



future. Important national and international treads will also be included.

- 2. Successful instructional qualities. This report will describe the kinds of learning environments, school-community relations, and business partnerships that lead to success.
- 3. Models: Where can you see this? We will identify model programs and help interested Vermonters see and "touch" innovation as it is unfolding.
- 4. Local Action: Getting things to happen in your town. Nothing in the Common Core matters if it doesn't lead to local action. This report will be a 1990's update of *The Vermont Design for Learning* and will help local schools connect with their communities.
- 5. Likely patterns of success. In this final report we will draw conclusions on the previous four efforts and project likely patterns for good quality early childhood, elementary, middle level, high school, and adult education. There will be several examples in each of these categories for Vermonters to consider

That is a snapshot of our work. We are trying hard to build a vision of education that is:

- Open and involving for everyone
- Reflective of the best local, national, and international information
- Adaptable to new needs and opportunities
- Focused on matching state and national resources with outstanding local curriculum work

Those who are concerned with education today have the distinction of bridging two eras. To borrow President Roosevelt's phrase, "much is expected of this generation." By our openness to new ideas and our teamwork with old and new friends, we will be equal to the task of illuminating a new vision for learning.

By doing our work well, the Common Core of Learning will make common sense, in an elegant 'way, and be a Learner's Bill of Rights worthy of the title.

Steven Gross



F.ducators share innocative ideas and hear what works for their colleagues.



A Hopeful Vision for Education:

a conversation with Susan Kuntz, Chair of the Standards Board

In July 1989 the Vermont State Board of Education established the Standards Board for Professional Educators. This 23 member, teacher majority board, was asked to define standards for educators, to create a statewide professional development system, to issue, deny, revoke, and suspend licenses, to promote local and regional standards boards, to evaluate and approve teacher preparation programs, and to examine other issues in teacher education and licensing. Susan Kuntz, Ph.D., Director of Graduate Programs at Saint Michael's College, is an appointed to that board and is beginning her second year as chair. Recently she was asked about her personal thoughts on her involvement in education, her professional opinions on the work of this new board, and her aspirations for the future of the teaching

profession in Vermont.

What is it in your personal life history that brings you to education and most recently leads you to become chair of the Stanuard. Board?

A: How does anyone really know why they are where they are? I come from a family of teachers and I understand the significance of that role. There are three guiding principles that help me formulate how I operate my life as well as my role as a teacher. One of those is trust. We make decisions, some by choice, some by circumstance, but we all make our own experience. It's fascinating to watch how experience unfolds, but you have to trust that it does so for some purpose. Another precept is an insatiable curiosity. I was always the one in school who said why? How? Please tell me more. What if everybody in the world jumped up at the same time, what would happen to the world? I wanted to read more, to know more. I think I got to a point in my learning where I knew I couldn't know it all alone, so I started talking to other people, forming groups of people. That led me to become involved with many groups who were concerned with being on the cutting edge of thinking in education and other social arenas. Through my involvement with the Standards Board I feel I know a lot about the issues of educator standards and licensing. But my curiosity demands more. I

like to think ahead to what might be the next steps. Where do we go from here? And the third guiding precept that has kept me in education is an overarching quality of hope. I always think there has to be a better way. I walk into schools and I sense the most hope of all the institutions in our society. I see the students and I say yes, yes, we can do this. That hope leads me to think about the changes that need to take place.

Q: Is that the philosophy that has led you to become chair of the Standards Board?

A: I have a vision of where we ought to be going. I think our educational system needs a complete overhaul. We need to put together a framework that allows everyone to want to be curious and want to learn, that builds on our innate need to learn. There is a new paradigm that is beginning to operate in this world. As I read Steven Hawkins and others on quantum physics, or Gustavo Gutierrez and other liberation theologians, there is a dynamic change taking place in the universe. The frustrating part for me is that we are in the transition to this new framework. We have to be patient and let it evolve. I'm not always the most patient person. I have a vision that school will become a more interactive place that nurtures inquiry and wonder, promotes hope. I am not so much concerned with the structure of schools, what they look like, as I am with the depth of what is being discussed, what is really going on there.

Q: Are there other key elements of your vision for education?

We need to create a communicative atmosphere. How do we talk about learning with each other, how do we get our ideas known? How do we create an atmosphere where we can critically question society, where we can create an inquiring society? I used to ask my kids when they would come home from school, "Did you ask any good questions today? What did you ask?" Their teacher jokingly suggested that I stop asking that because everyday before they left school they would ask her to help them think of a question. But at least they were starting to form questions and consider how to critically discuss an issue with somebody.

Q: During this time when schools are perhaps moving toward your vision, how can the Standards Board help make a difference?

A: I think the first thing that the Board has done is to bring together members who represent different constituencies in education and the public. They are speaking with one voice about what educators should know and be able to do. We are starting to build a shared vision. And we are developing the underpinnings for what that might be. We are really talking about some of the basic issues.

Q: Like?

 \mathbf{A} : Like what teachers should know. What is the depth of knowledge that teachers and administrators should have? The Board has taken a stand. Educators need to be liberally educated. What does that mean? That's still being corted out, but to me it means that educators need to have a depth of knowledge in some content area. They need to know something about the great ideas of the world. And then we need to address what teachers should be able to do. How should teachers act and how do students respond to those actions. I like Nel Nodding's concept of caring. She tells about a Mathematics teacher who is a caring individual. When a student says, "I don't know how to do this math, " the teacher not only says, "Here, let me help you." The caring teacher wonders, "What does it feel like for this student not to be able to do math?" Teachers should act in an effort to really get at the depth of who this human being - the student - is, so that we can relate. That's where good pedagogy starts.

So it seems that beyond just what I, as an educator, should know and be able to do, is a sense of the values that I should bring to our profession?

A: Of course.

How can the Standards Board promote that vision of an educator?

A: One of the things we are doing is modeling it ourselves. The issues that we deal with, such

as the tensions with administrators due to the teacher-majority structure of the board, force us to consider what we need to know, do and believe. We're asking, "What must it feel like to be an administrator whose professional fate could be determined by a teacher-majority board" It is much the same as teachers have felt for years about school administrators making decisions that affect their professional lives. So I think that there are some healthy tensions that exist, and that's okay. That is how we grow and develop and change. I think the Board is creating healthy tensions and looking for that, and growing and learning as a result.



What are some of the tensions that the Board has experienced?

A. On one level there is tension between standards and licensure. Which should drive the other? Are licenses minimal and standards optimal? There are also tensions between the different constituencies. We can learn a lot from each other. There is continuing tension about whether we should have an autonomous board. That will be a growing tension as we look to the role of the Board chair in the future. The belief of the Board is that any of its members should be eligible and able to

"Setting standards high encourages educators to move toward a vision of what schooling ought to be,"

– Susan Kuntz



serve as chair of the Board. The way the role is currently configured, that cannot happen, because it is just too demanding a job for members to carry over and above their regular positions.

Q: What are the five standards that the Board has articulated for educators?

 \mathbf{A} : The standards are learning, which I mentioned before, the depth of knowledge; professional knowledge, which we commonly think about as what teachers should know and do; colleagueship, advocacy and accountability. The ones I am most vested in are colleagueship and advocacy because I think that they are part of a new paradigm for teaching. The content base, the pedagogy base, and even the accountability piece are inings that have been expected for a long time. These others ensure that educators will go beyond that. They address some of the moral dimension of teaching. Colleagueship means taking more than a passing interest in what your colleagues are doing and how they are doing it. It means thinking of ourselves as learners working together to improve the learning of students and others. It means destroying the "egg crate" model of schooling where each classroom operates unto itself. We have a lot to learn from each other. It also means expanding the notion of who our colleagues could be besides other educators. Parents, community members, business people, and students themselves become partners in the learning process. Advocacy means that we start to support each other and what we really believe in and that we ensure that there are forums where we can do that. This means educators advocate not only for their students in all areas but also for good learning wherever that might be taking place.

Now how do you see these standards and their relationship to the current system of educator licensing in the state?

A: I think of licensing as minimal competencies that one would need to teach in an area. I hope these standards point beyond that, that they encourage more than that. I think the standards represent a vision of what we want to happen, what we know about best practice, what we know intu-

itively about how people learn. And ! think, in the utopian view, that we would not even need licensure. If the standards are set high enough and practitioners believe in them, or at least arrive at a consensus about them, then I think licensure becomes a mute point.

As I understand it, licensure was originally established to protect would-be practitioners and the public from a nepotistic system of appointing local teachers. What about the public's interest in education? Who looks out for them?

A: That's a good question. I hope the public becomes more knowledgeable about what is happening in schools. I think the standards do protect the public's interest. They encourage educators to connect better with the public. Remember that Standards Board members are themselves all members of the larger public, and there are certain members of the Board specifically designated to represent the public. As educators become more of a profession, we realize that we are obligated to many people. First, we watch out for the needs of our clients, the students. But also, we have an obligation to values and standards of the profession itself. Now when those come into conflict, it is important that we have the best people to sort out those dilemmas. I think we have those quality people on the Standards Board to deal with those kinds of questions. These are people who listen to the public and hear what they have to say and represent that point of view even when it might not be their own opinion. They are able to take multiple perspectives. They have enough confidence in themselves that they are not threatened to hear all the points of view.

Q: Tell me what the Board has been doing to implement those standards. How will they impact practitioners in the field?

The Board is monitoring the whole teacher preparation field. One way it is doing that is to challenge the presidents of all of Vermont's teacher preparation colleges to find a new results-oriented way to approve programs. We're asking them to reexamine their own programs and to find



ways to improve them. We offer the standards as guidelines. We hope to deregulate the process if we can be assured of increasing quality. The other piece that we're trying to give away is the relicensure process being turned over to the local level. Practicing educators will need to address those standards with their local and regional standards boards as they put together individual professional development plans. The bottom line is that educators have to keep growing and developing.

Q. How do you think these local ana regional boards will make a difference for teachers and administrators?

A: I think the first thing a local or regional board does is to make teachers and administrators reflect on what they do. Teachers and administrators are the ones who will develop a plan that makes sense for them. They need to analyze where they are personally and professionally. And then they need a vision of where they would like to be in seven years. Now how you get educators to balance their personal and professional needs becomes problematic. What I need as an individual is not always going to jive with the plans of my school or district. I think the bottom line is to be true to oneself and then decide how much can be given up to meet the needs of the school district. I'm hoping that districts will also look at the combined needs of individuals to develop a district growth plan. Now if you find that your philosophy of education becomes radically different from the espoused philosophy of your school, perhaps you should find another school more closely aligned to your point of view. It is also important to remember that plans are discussed with colleagues. No one develops a plan in isolation. That is the notion of colleagueship again, and that can be somewhat threatening for some individuals.

Q: That seems to be evaluative. As an educator develops a plan for growth, will this local or regional board approve it?

A: Yes. But remember that this is an evaluation of a professional development plan, not classroom performance. That responsibility still lies with administrators.

Q: Which leads me to the difficult question of how we address poor teaching.

A: First, we all have to encourage professional development. The Standards Board can offer guidelines for good professional development, but local and regional boards are going to have to address individual plans in context. Some people will



take little steps, others will take huge leaps, but every educator is growing. At the tough end of its duties, the Board does have the regulatory responsibility for disciplining educators and denying, revoking, and suspending licenses. The Board is dealing with these issues on a case by case basis as it establishes some level of doctrine. There are, I think, very few teachers who ought not to be in classrooms. But the first thrust must always be to offer a system of professional development that promotes growth. Again, the standards offer the guidelines to do this. Setting standards high encourages educators to move toward a vision of what schooling ought to be.

Q: How do you see educators as a profession?

A. I think the teaching profession has a very long and interesting history, but I think it is just coming together, just starting to emerge as a whole. It is different from other professions in our

"We need to put together a framework that allows everyone to want to be curious." – Susan Kuntz



society in that everyone has had the experience of school. So when we talk about standards for educators, everyone has an opinion of what that should be. Since public schools are publicly funded, we have to listen to what the public has to say. But in the last ten years, we have seen the profession learning to speak with one voice. There are still many voices out there, but they are more consolidated than ever before.

What is on the Standards Board's agenda for the upcoming year?

A: The establishment of the local and regional standards boards will be an issue that will eventually touch all educators. Out purpose is to support the development of those boards. Connected to that is the Board's determination to plan an effective statewide professional development system. By professional development, I mean from pre-licensure all the way through to when people stop teaching. There is a continuum of becoming a teacher: from teacher preparation and professional development schools or other partnership arrangements - to induction programs with internships for new teachers with lead or mentor teachers - to an accessible, affordable, practical and meaningful system for practicing educators. We're also looking at alternative routes to licensure other than through teacher preparation programs. I think we're going to have to look at that, but I'm not so sure it will be much different from the system we have now. That's why I want to talk in terms of a continuum of professional development that has many ways to meet a common set of standards. There is no one way to become a good teacher. The Board also wants to address the leadership crisis in Vermont schools, the issues that administrators face in their roles. I think the best way to do this is also through improved professional development opportunities for administrators.

Thinking about the issues of the Board from your unique perspective as Director of Graduate Programs at Saint Michaels College, how do you feel about the future of educators in Vermont?

A: I think it is very hopeful. I come back to my original point of view. I wouldn't stay in the profession if I didn't think it were hopeful. I think we're going to see more collaborative efforts, not only between educators but also between higher education institutions, and between those institutions and the public schools. The most exciting thing is that it all seems up for grabs. We can restructure education to be whatever we want it to be.

I talk to graduate students who apply to our program, who want to become teachers. I'm pushing now for licensure programs beyond a baccalaureate degree. I think prospective teachers need to first be grounded in some knowledge base. I want to have the brightest and best in our classrooms teaching our kids. I war to make sure they have some content area that they understand, that they know the philosophical base from which they come, and that they can articulate that in some way. I don't want people who can just function in the classroom. I want the best. I want the depth of knowledge. That is why this graduate job is perfect for me. They either have that depth or they don't get into the program. Once they are in, we talk about how to teach content, and how to share their passion for their subject. These graduate students want to teach because they have a passion for learning and they want to pass that along to all age levels.

I believe what is most hopeful about the future of teaching is that more and more teachers, and those who aspire to the profession, will continually look at who they are and how they wish to grow—the whole moral dimension of teaching. That is the exciting part: good people who know something about what they are doing and who work hard to become better. I think the Standards Board can play a very large role in promoting that hopeful future for the profession in Vermont.

Ken Bergstrom talking with Susan Kuntz



The First Network

The summer programs of the Governor's Institutes are a beginning place. Students begin to see themselves as adults and professionals. Teachers begin to see themselves as learners, with a responsibility to help lead their schools. But the work of the Institutes doesn't end there. A major grunt from the Bay Foundation in 1990 helped establish "The First Network" a program of communication and support which takes place during the school year.

he First Network connects Vermont restructuring high schools who have sent teachers to be Lead Learners in the Governor's Institutes. The network exists to provide a forum for the exchange and development of ideas, and to award discretionary minigrant funds to help schools achieve their restructuring objectives.

The project is centered at Mount Abraham Union High School in Bristol and is codirected by the Addison Northeast Supervisory Union Superintendent, Jim Lombardo, the district Curriculum Coordinator, David Marshak, and the Governor's Institutes Executive Director, David Gibson. In addition to Mount Abraham, four other Vermont high schools are the network's founding members: Cabot School in Cabot, Champlain Valley in Hinesburg, Otter Valley in Brandon, and Mount Anthony in Bennington.

Each high school's principal is the designated representative to the network and attends small working meetings to maintain contact and develop a common agenda for the project. During the network's first year, they defined a structure and discussed the potential functions of working together. A process was created for developing, documenting, and mutually reviewing each other's uses of network funds. And the principals established an agenda for the future. At network meetings time was spent on the current status of each school's restructuring initiatives, on progress toward their minigrant ideas, and on developing issues for future work. One meeting was held via the Vermont Interactive Television network with Lead Learners and principals attending in three sites: South Burlington, Randolph, and Springfield.

An Agenda for the Future

Leaders in Vermont's restructuring schools are nisk takers. And if it's lonely at the top in status quo organizations, it's downright desolate at times for these educators. They need to get to know each other and to develop a common voice in order to

support a vision of radically new schools. They need strategies and peer support for engaging their most committed faculty, their Lead Learners, their community resources, their personal and organizational abilities, and fulfilling their roles as team leaders in nsky situations.

The principals agreed that the most important function of the network is its usefulness as a leadership network – where doers and leaders in the field can talk frankly to help each other meet leaderThe network exists to provide a forum for the exchange and development of ideas, and to award discretionary minigrant funds to help schools achieve their restructuring objectives.

ship challenges and where there is a forum for them to develop a common articulation of needs and a collective set of strategies. These needs, and others, form the grounding for the future agenda of the network.

In the course of several meetings the principals built a list of common concerns and developed ideas about how the network could help them. Their questions are grounded in a common experience as leaders who have put themselves out front in support of rachal school change. The risks they take are based in a belief that incrementally improving schools is insufficient. "If we don't change significantly what we are doing and why we are doing it, restructuring will fail," says Champlain Valley's principal Val Gardner, "so, what are some of our most pressing challenges?"

Teacher Certification and Contracts Are relevant educational leaders and organizations aware of and discussing issues of school restructuring that conflict with longstanding structures of certification and contracts? How will Vermont move to "declassify" teachers away from subject areas if innovative



schools want to move toward integrated studies, heterogeneous groups, and multifunctional roles for teachers as leaders and learners themselves?

Standards – Some standards schools are held to now do not match up to the new structures they both need and are ready to create. Some standards, for example in areas of Public School Approval, or testing and grading practices, or other public reporting processes, may not block, but seem so depressingly irrelevant to the central mission of schools. Shouldn't our standards have more focus on that central mission?

Professional Development - In some places, teachers pack their bags for the summer. "See you next Fall," is not going to cut it in the future. How will we develop a system of professional development that requires, supports and rewards innovation and continuing professional growth? In addition, in many instances, the publicly elected governing boards don't educate themsalves on the issues. How can risk taking principals help educate boards to avoid micromanagement problems and a lack of educational focus in the role of the board? Furthermore, when principals go out to talk to people in traditional forums, they speak to those who want to hear. How can school leaders become more proactive, better at targeting publics and working politically to change those parts of the system which defeat change efforts?

Empowerment and involvement - We need to be clear that the collective empowerment risktaking principals support is not for stonewalling, preserving the status quo, or a kind of conservative anarchy of special interests groups, but for reinvention. The veteran teachers in network schools who say a particular event, or the year as a whole, has been so positive, have convinced principals that "doing something - trying something out" is better than most of the other alternatives: planning, talking about things, holding public awareness meetings. Principals know that students will become more involved only after teachers feel and have real power. And there can be a real block against student and teacher empowerment unless school boards and communities are ready for it. Board and public readiness is paramount. What can we do to help each other?

Here is an example of an issue shared among principals during a First Network meeting.

row do you talk to parents whose kids are the guinea pigs for restructuring experiments such as an increased focus on cooperative learning? Don't get defensive. ("Well, this is restructuring...) Talk about the big picture, the new goals for education for 21st Century workplaces, and the cycle of learning. Parents who are most concerned about what their child is getting in education will be among the most responsive to these arguments, because they want their children to reach farther than they did. Parents who are concerned about their children "mingling" with less motivated students need assurance that their child will be challenged, will not "catch the kooties," or be "dumbed down." Take every such challenge as an opportunity for a family teaching moment. Part of that teaching moment is to thank them for expressing concern. Suggest additional ways that they can get involved in your school's efforts to create structures for blending the goals of education with their instincts about excellence in education. Challenge them back, to get active, to provide ideas and to drum up community awareness and the involvement of concerned parents like themselves!



Broadly speaking the network is planning three levels of activities to address the strategic areas mentioned above:

Leadership – Principals in risk-taking environments need strategic support in a professional seminar, where both formal and informal communications can occur. Agendas for such meetings will be set by the network staff and published well in advance of the meetings. The suggested structure for these meetings will allow two hours for discussions on emergent issues and will then provide time for exploring the ramifications for both faculties and the public at large. The leadership dimension of the network will first and foremost provide a nurturing, focused and directed outlet for leaders.

Staff Development – A second type of meeting will support faculty. Network members and staff will visit teachers in their schools and bring together different faculties to explore common issues and to provide a place for both sharing what is working and to address what is not. These meetings might include: sharing journal writings and documents from each school, school visits by project directors, combined inservice, a conference on a shared training issue such as heterogeneous grouping, setting up teacher exchanges, and creating other plans for faculty study.

Public Aw. ness – The network will help remind the public and be a source of constancy in short, easily understood issues. An identity should develop around the network within and beyond the educational publics in Vermont. Activities in this area include developing this publication and connecting to other educational groups who articulate the messages of restructuring, as well as designing ways that network members can provide outside expertise to other communities.

Within these alternatives, as their first priority, the principals have chosen to develop a common voice around the issue of Public School Approval. The underlying questions of the principals for this priority might be expressed as: How can the state protect and support us while we change? Does the present school improvement process drive us forward? The State Board has offered to deregulate the education system in exchange for higher performance. The network principals are taking risks to

meet that challenge. Next year they plan to draft a document for discussion, and will then decide their next steps.

The network is beginning to work. The principals and Lead Learners of the network schools are working together to create systems of support and encouragement, of innovative idea development and testing, and of public awareness of restructuring. The network is well poised to continue its mission. With a first year behind it, the network should begin to see evidence of the empowerment of principals and their Lead Learner teams to significantly restructure their schools.

David Marshak & Iim Lombardo & David Gibson



International Affairs: The Soviet Union

The Institute on International Affairs completed its seventh year in the summer of 1991. Fifty Vermont students and ten students from the Soviet Union spent the last week of June together at the School for International Training in Brattleboro, studying topics related to achieving and maintaining peace, meeting global human needs, and facing critical issues of our time. Ken Delorge, Tom Learmouth, and Margaret Snelgrove attended as Lead Learners and presented this report upon their return.

f you asked "How was the week?" we would have to say "Interesting." We may raise more questions in this report than we answer. Is this the purpose of being a Lead Learner?

The kids were great, and Soviet participation was useful to the Vermont students. It was ultimately a positive experience. But we also saw things that we do in our classrooms that don't

work. Those parts of the experience confirmed our resolve to continue to move away from "telling" students things.

Students studied introductory Russian language everyday, and thoroughly enjoyed it. Was that because it was structured in a familiar "school" way? Do students in general behave within accepted tolerances of school cultures they have come to know? As adult learners in the Institute, we shared feelings of discomfort and boredom in unstructured groups early in the week. Do teachers behave within similar tolerances? What are the implications for school structures?

We viewed a Soviet film in its American premiere during the Institute. The film's lead actress and producer were participants at the Institute. One viewer commented that the film must have been good because it disturbed her. It disturbed us too. Are we just too used to American films, or had we seen too many? Or was the subject of a modern

American and Soviet students participate in a Congress of People's Deputies at the Institute on International Affairs.





31

Soviet's personal life experience a bit too removed from our culture? Similarly, a visit to a local dump seemed out of place at first, but in the end we were able to see connections to issues common to Americans and Soviets. We experienced folk dancing and felt good about that. But after experiencing three days of active simulations before embarking upon the Institute, we were drawn much more to a couple of successful key events.

One of the highlights of the week was an engaging cross cultural simulation called "Bafa Bafa." We participated equally with students in taking on cultural identities in small groups. One group's instructions were to talk to other people with arms folded, while another group was told that it is impolite to fold arms while talking to others. Then we explored issues of cultural understanding by playing out our roles as members of one group who try to communicate with other groups. We saw useful variations for that game in our schools.

As a culminating event, students were organized into regions of the Soviet Union in order to hold a Congress of People's Deputies. Students caucused among themselves before the simulated event got underway, which gave them time to research and develop ideas in preparation for performing as regional representatives during the Congress. Students had a chance to play roles in a conflict resolution exercise prior to the main event. It would be good to see more use of small groups for preparatory practice sessions of that kind in the Institute, and in schools too.

During the Congress, kids became aware of the potential for complex dynamics that occur at events such as these. One Soviet participant said, however, that the American students were much more polite than Soviet Deputies would have been. But we felt

that students had really bought into the event because it was active, risky, unpredictable, and it called upon their elaborative powers. It was exciting to see them work in this kind of environment and to hear what they had to say.

One of our major observations made at the Institute is that big events that involve creative and critical thinking skills, research, and active involvement require time for reflection. If we felt a need for more time to discuss activities that occurred during a one week intensive program, what does that say about a whole year of 44 minute classes? Don't bite off more than you can chew. Take time to achieve closure! If we want to change the way schools are, we have to be courageous enough to fail, maintaining that with enough faith we will ultimately succeed.



Science & Technology: Natural Science and Ecosystems

30

The 1991 Institute on Science and Technology, held at the University of Vermont from June 23 to July 6, completed its seventh year. Fifty-six Vermont students attended and were joined by four students from the Soviet Union and two from New York City to study the terrestrial and aquatic ecosystems of Vermont. Bruce Douglas, Helen Morrison, Peter Carini, and Shelly Snyder attended as Lead Learners and reported.

Best two weeks we've ever spent – dawn to dusk. We hope the kids got as much as we did. We were in the brooks, in the streams, on the mountains. It was intense. Then we would go back and process it all. Almost everything we were introduced to can be used immediately in next year's courses.

Science Institute
students maintain
journals to describe
their experiences
and impressions
throughout the twoweek program.



There was very little "down time." The weeks are highly planned. Yet, there is great variety in activities, so the planning is a source of comfort. One drawback was the travel time, which eats up the clock. But even then, we could see a social bonding and group formation occurring as study groups stayed closely together.

There is a steady repetition of principle ideas throughout the Institute. We just went with the flow, which was more like a rushing stream. This Institute is really so intense that there is a physical and emotional letdown at the end. It is very different from the school year!

The students are a group with high energy who want to be there. But it is also a good mix of students. Even those who were anti-school learned to incorporate group needs and quickly got turned

around. It's the living together, we think, that does so much for helping us see young people in a new light. Unlike school, everyone at the Institute is on a first name basis. We had no discipline responsibilities, which freed us to interact exclusively as elder learners alongside the students. Every school should have "resident assistants!"

We came away with a strong sense of hope about the future. These students are going to make a difference. They are talented and they care. They can interact with each other and with adults in very healthy ways. You know, every school has two or three students like these, but to see 60 of them! So many leaders!

We think the Institute brings out the creative side of these young scientists through writing in journals, sharing experiences in small groups, and having fun. Overall, we have to say that it was emotionally and spiritually uplifting, but physically exhausting. Still, the best two weeks we've ever spent!

Art: The Creative Process

The 1991 Governor's Institute on the Arts was held at Johnson State College from June 21 to July 7, completing its ninth year. One hundred thirty Vermont students and four Soviet students came to explore the process of creativity. Maureen Cunningham, Julia Hewitt and Ken Martin attended as Lead Learners and gave this report.

e were struck as much as anything by the absence of things we thought were necessary to organized learning: a lot of rules, strictly determined individual schedules, experts presenting content. Yet, the two weeks were an incredible experience. It was so liberating! We, like the kids, chose what we wanted. And there were so many choices.

One of us asked the director early on what we as Lead Learners should do. The director looked puzzled and said "Just do what you want to. Have fun." We had no more, or less responsibility than the kids — which was to explore artistry in ourselves with intensity and passion.

There was no core content other than morning chorus and a brief period for community announcements. We learned a lot from that structure. If you give people something uplifting and successful to do everyday, there is little need of rulesbased discipline. Inner discipline comes from a love and success in doing things well. After chorus people would drift away into countless corners of activity for the day. Students went with the flow. Adults in guiding roles modeled artistic behavior and students came to watch and perform. Students used their free time very constructively. For example, although some courses were optional in the afternoons, they were frequently filled to overflowing. Evening performances brought everyone out and together again.

The organizational aspects of the Institute were determined by enrollment preferences of the student, including ourselves. One of us signed up for a poetry class to discover that only one student signed up. But when we came together with the teacher, we were just a table of three people studying poetry with equanimity. There was little to differentiate between juvenile and adult learning, and between learner and teacher-as-learner. We were co-creators of new knowledge.

It was interesting being a learner again. We teachers lose the time for this, and the Institute helps us remember. We came away from the Institute saying "We want to draw, paint, dance, write, and live as artists! We want to learn from experience and expression and to feel as committed to it as we do today."

Lead Learner Julia
Hewitt (center) draws
with students at the
Governor's Institute
on the Arts.





The teaching methods modeled in arts are unlike anything done during the school year. We would be in a classroom for a whole week with the teacher never saying more than a few words about drawing, other than to get us started on that day's work. Then when she did say something to us individually, it would be so important to our growth! We tried several examples of some of the basic artistic challenges – such as drawing a portrait of one's self. Each one was equally challenging, different from the last example, and worth doing again. We wish we could think of ways to make other subjects so compelling.

Another observation about the Arts Institute is that everybody loves what they are doing and it is contagious. Of course grades weren't necessary to captivate attention and motivate learning. It was the love of art in the leading artists-performers that motivated us. The teachers were exposing their own work, and themselves, to us and the students. They related to all of the learners as peers. We think that is why the students, with a sense of freedom, didn't head for the hills but instead took up the challenge. Intrinsic motivation was the source of intensity. One group of students came to an instructor saying "We have to practice, and we need you to be there. Is 6:00 a.m. Ok?"

One of the elements that makes the Institute so special for students is that it functions as an intro-

diction to the real adult world of learning and growth in the arts. The students responded beautifully. There was a complete lack of childish behavior, of juvenility. By the end of the Institute they had taken on, in a relatively short time, a lifetime perception of themselves as artists. And so did we.

During the closing day there was an incredible exposition of arts which carried the themes and sense of community and completion right to the very end. We gathered on stage to tell each other what these two weeks had meant to us. It was obvious that the students didn't want it to end. Neither did we. The Institute is a learning environment that constantly validates one. It feels safe to take risks and to share yourself, your art, your soul, unlike our schools. One student said that no matter how crazy he got in his risk-taking, he was still "more normal" than the kids around him. So how can we create this kind of environment for everyone in school? If we succeed, our students will luxuriate in intellectual and creative freedom and simultaneous challenges. And like we did during these two and half weeks, they will spread their wings.



ALONG THE SOLUTION RESTRUCTURING

ALONG THE ROAD to restructuring, many pilgrims encounter the ogre of content, his satchel bulging with weighty textbooks, of which maybe two-thirds of the chapters were covered last year. "What about colleges?" he bellows. "They're going to expect our kids to know this. How will they compete?"

These days some staunch pilgrims are replying, "Maybe colleges need to change their expectations. And some already have." If you ask colleges or employers which is more important, a smorgasbord of facts partially learned, or the ability and tools to learn, most will probably choose the latter.

Restructuring should start with a reordering of priorities, a reordering that wouldn't be necessary if we were all satisfied with what schools are doing now.

We need to reassess the value of the liberal arts concept of exposing all kids to a little of each subject, and make more room for individuals to explore selected areas in greater depth.

Maybe the common core should be 25 percent of the school curriculum, not 75 percent. Perhaps the first hour or two of the school day could be devoted to basic concepts in the content areas, and the rest of the day the students could do something with the information and skills they have been exposed to. After they have produced something, they should be able to present it in public. How refreshing it would be if all people in a school, including teachers and administrators, were actively creating new stuff every day.

We might stop using teachers as

dispensers of information. Instead, utilize guest professionals to lead introductory activities, field trips, slide programs, sharing the excitement they find in their specialty with the whole school. In the process, they would present small chunks of content, meaningful because it would have a context.

Here's one way this might look. An architect comes to school and gives a slide presentation of local architecture, teaching the math necessary to design scale models, the factors to consider in site selection, orientation, and materials. In the next two weeks, teachers would help students with the construction of model buildings, incorporating history, science, art, language, and other areas. The emphasis would be on creating original products, using academic subjects as tools.

At the end of two weeks, the architect would return and lead the students in the presentation and evaluation of their projects. The projects would remain on display for the next couple of weeks, in the school gallery. Written descriptions of the projects, and photos, would go in each student's portfolio.

If a particular student developed a strong interest in architecture, he might choose related projects in other theme areas. After he had accumulated evidence of sustained and significant accomplishment in architecture, he would apply for certification in "basic elements of architecture." His advisor would either recommend certification or help him develop additional projects toward it. This would then appear on his diploma, giving colleges and pro-

spective employers real information about the student's accomplishments beyond memorizing information.



Guest professional
Arthur Hall shares
his excitement
and insights with
high school students
in Vermont.

A student diploma might read like this. "Joe Blow" has demonstrated sustained success in the essential behaviors for learners as defined by the district. He has completed the core curriculum to mastery level. In addition, he has created significant original projects in the following areas: (a list would follow of the special topics the student had pursued, the exact wording of each certification having been decided by the student, his advisor, teachers and guest professionals).

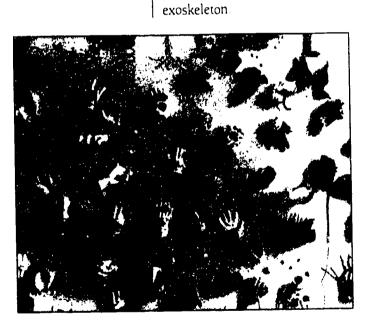
In this way the diploma would be a meaningful document that would serve to validate real achievements of students in using individual goals and interests. Combined with an efficient portfolio program, this shift in emphasis from acquiring tools for later use, to using academic tools in student-generated projects, could make schools immeasurably more dynamic.

Ken Martin



TIPOUR THE EYES OF AN OTTER: Building Community Through Arts

NEWSPAPERS WERE SPREAD out on the cold tile floor. My partner and I sat face-to-face, legs crossed. She coated my left hand with Vaseline and at the same time massaged my hand with her fingers. A thin layer of gauze dripping with plaster wrapped around my hand until my fingers, thumb, wrist and palm were completely covered. Minutes later the plaster dried and hardened. We worked together, carefully removing my hand from the cast without causing the white cast to crack or break. My living hand emerged from the plaster shell, leaving behind an



Maggie Sherman's hand casting project builds community and leaves lasting impressions at the Institute on the Arts.

I looked at my hand and thought it was rather ordinary looking. I looked around the room and saw 20 others looking at casts of their hand. Next, we created and decorated our cast to symbolize our vision of our future; a visionary project. Paint, yarn, gluter, bells, lace, streamers, feathers, and straw turned our hands into visions of our future. The future was in our hands. Then every hand of some-

one at the Governor's Institute on the Arts – students, teachers, artists, guests, and children – was proudly displayed on the gallery wall. Side by side, each hand unique, and part of a community of hands

My vision is to develop a community arts project at Otter Valley Union. High School, I see it as a collaborative effort of all members of the school community to work toward a common goal. I will measure its success by the process by which people individually and collectively work together to reach a final presentation. Each person will be invited to express, to be understood, to assist another person, and to be assisted.

Central to my vision is my deeper appreciation and understanding gained this summer, that using the arts to build community is a way everyone can learn and everyone can benefit. The arts provide an ideal avenue to improve and enhance team-building, cooperative learning, communication and mastery learning – areas that restructuring schools like Otter Valley continually address. We know well that schools in the midst of change need opportunities to bring people together to share.

What I experienced this summer convinces me that an arts activity used to build community is a living model of active learning, involvement, and risk taking in education. Individuals can commit themselves to a project in ways that are not threatening, not judgmental, not costly, and yet which allow them to set short term and long term individual and group goals. My own personal goal for a com-

munity building arts project might be to reach 100 percent of the school – bus drivers, school board members, parents, administrators, secretaries, and students.

Perhaps most important, a community arts project is an avenue for all students to create and perform. Students can learn that performance and presentation of a final project are valued by the school community. And they will feel the immediate rewards of accomplishing something, completing a project, along with others.

They will also learn that the final public presentation and display of a community arts piece is a context for an assessment. The public eye, and the student, evaluate the work. Students receive direct feedback, reactions and comments, which is risky, and rewarding. Then too, students can give their direct responses to others, which is practice for lifelong learning, growth, and change. This mutuality of assessment and evaluation is needed in restructuring schools. We need our students' feedback on our growth as much as they need ours

Community-building is an ongoing effort in restructuring schools. And the purpose and goals of art can be a positive, creative force to move people together, improve communication, and form new relationships. As a school community that is already in motion, with a vision of its future in education, Otter Valley should be able to introduce new community-building arts projects to produce an even more colorful future!

Maureen Cunningham



HOUGHES END INDSOPH AND PRACTICE

AS I REFLECT upon the first nine years of my teaching career, I find myself asking a vital question. Is my espoused philosophy of education central to my actual practice? As an undergraduate student I wrote a poem entitled "Experience Life" which at the time, formed the backbone of my philosophy. Now nine years later I wonder if it still holds true.

The poem urges children to search for the wonders of life, to use their whole body, and it prompts them to go beyond seeing and hearing to a fuller engagement with a life of learning. The poem's metaphors are touching and being touched, staying open, using all one's senses, and following one's

star. It expresses a fundamental faith in the unity of knowledge and the ultimate reality of learning through the experience of life.

Does it still hold true? Ideally yes. In practice, honestly, no. What happened during the past years to cause me not to live up to my own philosophy of education?

Simply put, in the day to day world of my classroom, I slowly lost the vision. I made a grave error in not keeping my philosophy visible. I should have placed the spirit of that poem upon my sleeve and within my heart. Instead it found its way into box, placed upon a shelf, labeled "insignificant."

My philosophy is not earth shattering. It says nothing about school budgets and community involvement. Nowhere in the poem's lines will you find mention of student to teacher ratios, unions, school boards, principals, I.E.P.'s, faculty meetings, standardized tests, or discipline theories of any kind.

"Where there is no vision, the people perish..." Proverbs 29:18. Many times during the last school year I felt like I was slowly and steadily perishing. Did my students notice? Did my principal notice? Did my fellow teachers notice? Regardless, I need to now react and do something, and this is my first step. As a new school year approaches I pray that I will be ever minciful of the words from a poem written nearly a decade ago.

Ken Delorge



Lead Learner Ken
DeLorge muses about
the moral dimension
of teaching.

One Year Later...

During the summer of 1990, 12 teachers attended the three Governor's Institutes as Lead Learners. They came away from the experience rejuvenated and inspired to initiate change in their classrooms and schools. "The two weeks of the Institute are hectic and exhausting, but I found myself wondering how this kind of experience could be accomplished during the school year" says Jennifer McKay, a Science teacher at North Country Union High School, who attended the Science Institute. This was the challenge facing the 1990 Lead Learners. One year later, they can look back at the school year and say, yes, they did help bring about change in their classrooms.

🖣 or some of the Lead Learners, change in the classroom meant leaving the classroom. Helen Morrison, a Science teacher from Cabot school, attended the Science Institute. She returned to her school to organize the Nichols Pond project (see page 40). Designed as a multidisciplinary project, Helen's sophomore Biology class visited Nichols Pond for a total of three weeks of study. Helen began by combining her class with a Physical Education class but soon an Art teacher, Mathematics teacher, Special Education teacher, and guidance counselor joined the team. All of these teachers used their expertise to help students study a different aspect of Nichols Pond. "When at the end of the project, I gave the kids their portfolios containing all of the work they had done on

the pond they couldn't believe it" says Helen.

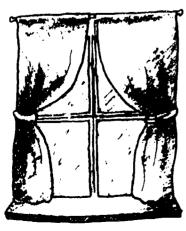
Ken Martin, a Biology teacher at Champlain Valley Union High School, returned from the Science Institute to a department in which two of his colleagues had participated as Lead Learners in previous years, and to a school community in which restructuring has wide support. "Most of us agree that change is needed, and also that it will take a team effort," he says.

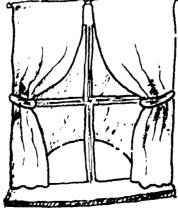
Ken worked with the Science department to institute a science writing portfolio system. "It was a simple start, something that we could accomplish without any structural change, that just came out of us sitting down together and thinking as a team." He also gave a push to revive the dormant idea of a science project night, and the group worked together to bring a project dimension to all Science classes. "Like the portfolios, there was plenty of room for improvement, but the important thing is that a start was made. Also, many of the projects were outstanding, and we were able to recognize many individual students for their unique contributions.

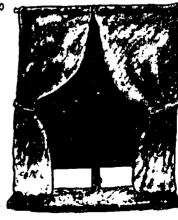
Active and creative learning became even more emphasized in Ken's classes (as described in his article on page 43). More importantly, the philosophy of the Governor's Institutes has reached colleagues and administrators, and has won support for larger structural change that will make it easier for all students to experience the deep involvement in learning that is modeled by each Institute.

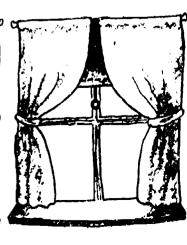
"The Governor's Institute of the summer of 1990 was a catalyst for change in my approach to teaching"

Illustration adapted from a drawing by Maureen Cunningham.









mmm.

... oh?

uh-oh

Shh ...



writes John Wheeler a Mathematics teacher at Cabot School who attended the Institute on International Affairs. "During the following school year, I experimented with some performance-based lessons in all of my high school math classes. For example, students, in small groups, would work on a single problem for several days and prepare a written analysis including assumptions, strategies, conclusion and evaluation. I have been encouraged to see students really take pride in the finished product. A three or four page type-written paper that has been revised and perfected is a new experience for math students."

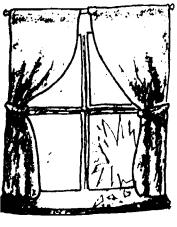
"I think the biggest need is to create a risk-free environment for students", says Jane Sarno who teaches English at Otter Valley Union High School. Jane attended the Arts Institute. "School must be a place where it is safe to experiment and learn. I really learned that at the Governor's Institute. I learned as a student that it is okay to fail. We don't do that in our classrooms."

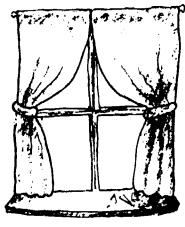
"The biggest thing I learned at the Institute was to back off as far as being a traditional teacher, says Curtis Maine. He taught Science at North Country Union High School and was a Lead Learner at the Science Institute. "The Institute helped me with the idea that it is better to be a coach instead of a teacher. This year I gave students the opportunity to choose their own direction and choose their methods of learning which included allowing them to fail."

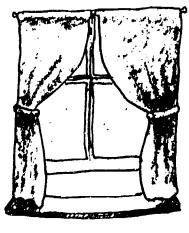
"For example, I teach Science and labs are traditionally like following a recipe in cooking. Add this much of this, this much of that, and when you are done you have the product you expected. This year we discussed what we wanted to find out and the purpose of the research. That's all the help the student's got. They had to write their own procedures to determine materials and solve problems on their own. At the beginning I didn't know how to do this kind of group work. I was going from group to group and not allowing them to make mistakes. I'd push them in the direction that I thought they should go. But I learned that if they are going to make mistakes they have to learn that this will happen and it is not that big of a deal. If they make mistakes they can start over. In the end they were excited about their projects because they felt like they took charge of their own learning."

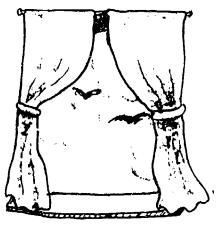
"I think that talking outside of the subject, the students learned more about how to learn, how to search for knowledge. To me this was more important than learning about, for example, acceleration. What they won't forget is how to explore. In the traditional system they are not taught how to learn. When they learn something it is so carefully laid out for them, they are like assembly line workers. They have no stake in the process."

"What I used most were the writing experiences at the Institute. We did a lot of journal keeping and we also did that in my chemistry courses for the first time this year" says Jennifer McKay. "The









ouch!

oh.

hmm ??

awe!!



writing was a method for students to understand themselves."

"Another idea that was inspired by the Institute was that my seniors took on some of my younger classes to teach Science. It was interesting to see how they took charge and I didn't." Jennifer also worked with a group of students, to launch a community recycling project in 1990. "It was a lot more bareaucratic than we had expected. For example,

Every teacher really wants to make a difference to his or her students and we can't be content with just pouring out information.

• • • •

we couldn't choose our recycler, that was a decision made by the town authorities. But the difficulties encountered in getting a program like this started was a learning experience in itself." This student-organized project is now operating and the number of products that will be recycled is growing.

Despite her successes, Jennifer has found that the school system limits the amount of change that can occur. "Everything was team

teaching at the Institute so I saw it working there. It would be great if we could use it at school but everybody is concerned about logistics. Seemingly insignificant things become insurmountable because of the complex chain of command."

Michael Dwyer teaches English, American Studies, and History at Otter Valley Union High School. He attended the Institute on International Affairs last year. "At my school some teachers practice the 'mystery mentality' of testing. One shouldn't be sharing objectives because teachers think that if you tell the students what you are going to be testing, then the students will only study that one thing. I know that one area where the Institute influenced me this year was in creating better test designs. I shared lesson objectives beforehand and developed a performance-based assessment with Jane Sarno."

"I am very strong in my feelings towards a heterogenous classroom. Right now Otter Valley is detracking. That poses the question, what are we going to do?" says Michael. "If we have faculty consensus in creating heterogenous classrooms in the humanities, how do we attract brighter kids or continue to provide challenges to them?"

In 1990, Michael taught a unit on the French Revolution for a 9th grade class. He used a text book written on the 8th grade level and he provided advanced reading lists for kids who read at the 10th grade level. "We are looking at pilot teams. We want to be able to divide up the class but still have it as one class for all kids." In 1991, Michael plans to completely redesign a history course. He will do away with presenting history in chronological order as found in most textbooks and present history in terms of issues. For example, he may examine the concept of revolution as it affected different nations at different times.

"The Institute reinforced many of my beliefs about goals, problem solving, and teacher as guide" says Patty Heather-Lea. She teaches Mathematics at Champlain Valley Union High School and attended the Institute on International Affairs. "Teachers have goals, you shouldn't hide them and make it a big guessing game. I hung up a sheet in my classroom with goals. It listed the kinds of things I wanted my kids to be able to do when they sit in my classroom. I want them to: play with math, use it as a language, see patterns, reasons with it, enjoy math, and engage in the spirit of math."

"The Institute also helped me to think of myself as a guide, a tone setter. I want to light the sparks in students' minds so they can come to realize that they can start up their own engines. I realized this past year that a student's single question can help the whole class get going if I simply don't answer the question. The kids ask questions and I ask questions back. I ask students, 'can you prove what you say, would you lay your paycheck on this? No? OK, you don't know what you are saying.' I learned to probe and let the process of learning and discovery happen"

"Despite the progress I am making, sometimes I feel I am out on a limb. I don't think there is enough support and I am pretty lonely sometimes. Each teacher is in their classroom and they do their own thing. They think about going into this little compartment and that's it. There is not much shar-

ing going on. People feel threatened by change. I wish there were more support."

"At Cabot we are trying to get away from the lecture style of teaching and plan activities that enables students to work in cooperative learning groups." Carlene Bellamy is a Special Services teacher at Cabot. She was a Lead Learner at the Arts Institute. "The idea is to develop interdisciplinary units that incorporate experiential learning. We feel students learn best by doing. The change enables special kids, who are strong in performance-based activities, to excel. The classroom teacher and I worked together. This dove-tailed with the Governor's Institute philosophy which supports performance-based activities and performance-based assessment."

"The Governor's Institute also encourages the use of media. This year I focused on integrating technology into the classroom through the use of radio and video equipment. The students were very motivated and enjoyed making radio and video shows. They also began to take an interest in being actors, performers, or presenters."

"In my particular instance, I was trying to set up a new course called Art & Music Now. The Institute played an important role in clarifying what I wanted for course objectives as well as the various paths I might choose to arrive at those goals" says Jim Rigg. Jim is an Art teacher at Mount Anthony Union High School, he attended the Arts Institute in 1990.

"In this course I let the students know that we would be working together setting our own goals. I am an Art teacher. I let the students know what my expectations were from the beginning for the art. But, when it came to the music, they knew more, in terms of 80's and 90's music than I did."

"I was a facilitator, they taught the course. We took a cultural approach and tried to see how both music and art are interwoven over time and culture. We looked at how art and music demonstrate history. Students studied weaving, pottery, cave drawings, as well as art and symbolism. Some students even made their own musical instruments."

"I let the students have the exam requirements right at the beginning. They also had areas of interests where they could write to their own contracts

of expectations. This was the first year I did this in all of my classes, it went well and I will be doing it again. We also plan to take some of these ideas to other classes next year."

"The Institute has really had an impact on the way I perceive students and the way I perform in the classroom. The most pronounced change is the reinforcement that every teacher really wants to make a difference to his or her students and we can't be content with just pouring out information." These are the views of **David Book**, a Social Studies teacher at Cabot who attended the Institute on International Affairs in 1990.

"The Institute led to an innovative approach to my U.S. History class. I had not been pleased with the way history courses had been taught so at the beginning of the school year I told my junior class that I had eradicated all tests, all quizzes and all homework. The kids were immediately elated until they sensed there was a catch. They had to decide on the content of the course. The students developed individual portfolios such as art, music, research, oral history, creative writing, and focused these approaches in terms of a cultural strand such as transportation, food, religion, or politics. Each student selected a cultural strand and traced it from Exploration through the Twentieth Century. The students designed their own project, developed their own assessment rubric, and evaluated each others portfolios. The students assessments of each other were within five points of my own assessments. Other students now want to take U.S. History, something unheard of before. I owe it all to the Governor's Institute "

The Governor's Institutes teacher and school development program is a grassroots approach to change in Vermont's classrooms. The Lead Learners represent a small but growing group of teachers who have taken to heart the challenge of improving education in Vermont. Not only have their students benefitted by their imaginative and innovative teaching styles but they, in turn, have been rewarded by their student's renewed motivation and enthusiasm for learning.

Elizabeth Lasser



The Nichols Pond Project

A one-year study of a local pond by a team of high school students and teachers increases our knowledge as well as theirs, and provides a model for multidisciplinary learning.

he last time anyone had conducted a detailed study of Nichols Pond in Wolcott, Vermont was 1939. At that time the Vermont Fish and Wildlife Department conducted tests of water chemistry and recorded a depth of 49 feet. Some fish stocking had taken place since that time, but not much else was known. A detailed depth contour map had never been made. But Cabot students and teachers have changed all that.

Between pond visits,

students developed

skills to collect future

data, connected their

experiences to other

studies and used data

collected in previous

excursions.

We visited the pond during three seasons for several days at a time and conducted a unique multidisciplinary study.

The idea for the project came to me as a result of my participation in the 1990 Governor's Institute on Science and Technology. Learning in the field through active participation and challenging experiences in the environment are key to the Governor's Institutes, and became central to the Nichols Pond Project. As the idea developed, a team of six teachers from as many disciplines joined

to design the project; Suzanne Rexford-Winston (Art), Sue Chickening (Guidance), Nancy Devaux (a Science student teacher), Aline Emmell (Special Education), John Wheeler (Mathematics), and myself in Science.

The intent of the program was for a group of students to become intimate with a particular environment – Nichols Pond – through a coordinated set of experiences and studies. For example, science and mathematics content were used to measure and analyze the pond's depth, water chemistry, water discharge, soil content, forest type, fungi, fish diversity, and native animals. Integrating science with other content areas, students would sketch specimens and landscapes, identify species, write impressions and observations in journals, keep data

and findings, study contour, determine the pond's surface area, learn to canoe, snowshoe, and use cooperative group skills in challenging tasks.

Phase 1 - The Fall

On Monday, October 22, the first of five days' work, students went to the pond to canoe, collect data on depth and temperature, and take small fish samples. They learned to use common canoe strokes such as the jay stroke, pry and draw, and they learned to use safety precautions such as how to move around in a canoe without putting others in danger.

On Tuesday, Dr. George LaBar from the University of Vermont helped students collect fish and other aquatic organisms in order to classify and determine why certain species are in the pond. Minnow traps set on Monday gathered specimens of aquatic life in the pond. Another means used for gathering samples was netting, a process in which two students at a time wore waders out near the pond's dam carrying a net with two poles on the ends. The pair of students made sure the net reached all the way to the bottom so fish could not avoid being caught. In this way we were successful in catching small aquatic life.

On Wednesday, Dan Bean of St. Michaels College came with test tubes, samples collecting jars, rubber gloves and chemicals needed to determine water quality, including pH, O² and CO², minerals, and hardness. Most of the tests were completed in the school van because of cold winds and rain. Water discharge was also measured at the dam and down river from the dam. Additional measurements were taken for further computations in the classroom.

On Thursday, Dr. Dale Bergdahl of the University of Vermont explored soil and fungi with the students. He explained and showed examples of cancers, disease, and the effects of animals and humans on trees. Students dug small pits to examine the history of the area from the ground layers. Four or five pits were dug in different areas to get a wide variety of information about the land surrounding Nichols Pond.

The group hiked up Nichols Ledge to examine trees, weather effects, and exposure on the ledge.



Eileen Powers, of the Governor's Institutes on Science, accompanied the group and later assisted students in mapping the area's elevation.

On Friday, Jon Rashleigh, a senior in forestry at the University of Vermont, investigated trees with the students. He assisted them in identifying types of trees, their differences, where one type like to live, how some can live in the water and other can't, how trees become introduced to an area when there is no parent tree nearby, which trees animal depend on for food, and the effects of logging and human contact on the trees around Nichols Pond. Throughout these days, students wrote their observations and impressions, sketched, and talked to each other in pairs or during small group exercises.

Phase 2 - The Winter

On March 6-8 students returned to the pond to snowshoe with John Kulish, a naturalist from the Harris Center in New Hampshire. During their wilderness trek students identified animal and bird tracks and scat, and determined from their observations the behavior and habits of the animals. They also were stimulated to think about the impact animals have on the environment and how the environment affects them. Students also built temporary shelters and fires to enhance their understanding of survival in winter.

On the second winter day students conducted a follow-up study to the Fall water discharge to compare seasonal difference. They learned more about fungi and tree rot from forest pathologist Dale Bergdahl, and gained abetter understanding of the role of decomposition in the regeneration of a forest. Specimens were collected for lab study at a future time. Students participated in a simulation of predator/prey relations conducted by Sharon Behar, an educational consultant. The simulation is an engaging way for students to explore the dynamics of survival by assuming roles as different kinds of animals.

On the third day of the winter experience, senior forestry student John Rashleigh helped students identify trees using their bark, leaves, shape, and branches, among other methods. Students also used maps and compasses and took core samples

from trees. Water samples collected this day were brought back to the lab to process and analyze later with Biology professor Dan Bean. In this phase of the project, students continued to keep daily journals of their experiences and observations, using sketches and graphs were useful.

Classwork

Between pond visits, students developed skills to collect future data, connected their experiences to other studies and used data collected in previous excursions. For example, between the Winter and Spring visits, students determined the watershed for the pond, created contour maps and graphic representations of the pond depth and elevation,

Helen Morrison, a 1990 Lead Learner, returned in 1991 to be a staff leader at the pre-Institute conference.





studied water samples to determine winter water chemistry, and studied fungi and tree rot specimens in the lab.

Phase 3 - Spring

In May, three more days of visits were made, which differed form the first two visits in that they were full days rather than half, and included an overnight on the pond's island. New water depth measurements filled gaps in the Fall data, to complete the contour map of the depths of the pond.



Students were asked to prepare a plan for the use of Nichols Pond.

Additional water samples were taken for chemistry analysis, as was the water discharge at the dam, all of which were used in comparative analysis with the previous two trips. Geologist Chris Hansen from the University of Vermont spent a morning exploring rocks and soil and presenting the geologic history of the pond area.

Other activities included sketching the pond from the island, giving a 360 degree panorama of the pond, a map and compass task of finding the outlet from East Long Pond into Nichols, and a final playing of the Predator-Prey simulation - this time with the students having worked out some interesting strategies for survival. The overnight experience gave students a chance to get a feel for the night life of the pond; nocturnal sounds of insects, and the cries of a nesting pair of loons.

Evaluation

Two forms of evaluation were used. In one, students worked in pairs on the various aspects of writing a clear, concise, and coherent analysis of the year's study. A second task was completed on the pond. Students were divided into three groups: developers, loggers, and environmentalists. They were each given a packet of all the work they had compiled and were asked to prepare a plan for the use of Nichols Pond were they able to buy it for their particular purpose. All of the presentations had to include a plan showing use with the least adverse impact. In addition, they were to prepare to field questions from the other groups in an intelligent, knowledgeable manner.

Summary

The Nichols Pond Project at Cabot School is an example of a multinterdisciplinary approach to learning that involves concepts taken from existing curricula in English, Science, Mathematics, Art, Physical Education, and Guidance. The project is organized around hands-on learning in the real world, gathering data for lab use and analysis, simulations to explore issues, roles and relationships in the animal and human use of the environment, and opportunities for self-expression, and individual and group problem-solving. Students are involved in collaboration and research with other students, teachers and guest professionals and naturalists. All of these endeavors and opportunities helped students learn about the interconnectedness of a particular ecosystem, the effects of plant and animal life, humans and seasonal change on that system, and led to the publication of a report in the form of a field guide to the pond based on student research. In at least one result - making a depth contour map of Nichols Pond - new knowledge was created. That collaboratively created project is a good example of the way such a learning approach brings new levels of meaning into school experiences and makes positive connections between school, learning, and the environment.

Helen Morrison



The Last Two Weeks

There is currently a deep but honorable debate over the role of traditional content in the curriculum. Some radical voices say we should forget about trying to teach a conventional body of knowledge, and concentrate instead on allowing students to develop a holistic view of the world, based upon self-directed inquiry into topics of their own choosing. Other teachers worry about throwing away the liberal arts concept that has always been a part of an American education, and wonder whether we can leave our students unprepared for college. "The colleges want those scores," they say. My own view is divided on the issue.

However, as a participant in the Governor's Institute on Science and Technology in the summer of 1990, and the Governor's Institute on the Arts in 1991, I experienced firsthand the tremendous educational power of student involvement. I have always been trying to incorporate some of this spirit into my own classes. What follows are some of the bright spots in this change, all of which occurred in the last two weeks of the 1990-91 school year.

Projects

It was the week before exams, and my plan book said we'd be seeing Jade's environmental science project that day. I had offered my students a variety of project options, based on plans and contracts. Given the choice, a few had opted for independence. Jade had been checking in for attendance purposes, and then going off to the library or music room for independent work. The trouble was, I hadn't seen much evidence that anything was being accomplished. I wasn't even sure that he would remember that this was the day that was supposed to justify the weeks he had not been attending class. His participation in class, up to that point in the year when I had offered a project option, had been minimal. If he had wasted his project time it wouldn't have been much different, but I was still uneasy as I directed my Environmental Science students to the auditorium. To my relief Jade was there, running around in preparation, and he even gave me some programs to pass out. The class settled in the farthest back corner of the auditorium, and quickly lapsed into the displays of boredom and rudeness that sometimes characterizes students who do not want to be in school. The lights went out, the noises rose.

Suddenly there was an enormous boom from the school's largest drum. Lights flashed. A pool of dry ice vapor wafted over the stage. The amplified voice of Jade's narrator intoned, "The Big Bang:..."

Jade appeared on the stage, dressed in black leotards under a huge cape which began to fly outward as he rotated underneath - the universe was

expanding. In the next scene he juggled balls of atoms. As he juggled, the balls began to stick together, forming molecules of the organic soup. The performance went on for 12 scenes, through the tortured efforts of sea creatures to go ashore, insects to invent flight, culminating in a haunting view of future man, a goggle-eyed, disturbing masked creature.

Jade had conceived original music for the entire performance, had built props, costumes, and paper-mache masks. He had written a summary of the history of evolution that was much more detailed than I had expected, and far more detailed than that of any high school biology text. He had choreographed a dance performance that was educational, dramatic, moving, and thoroughly memorable.

When I saw him later and congratulated him on an extraordinary project, he thanked me. For what? I wondered, remembering how little contact I had with him over the several weeks he had been away from class. For giving him the opportunity to step outside the bounds of the curriculum, and excel?

The next day another much different project was scheduled to be presented. I brought my class outside to view the work of Neil and Rick, who had been working on building an outdoor garden. Rick had been sent home several days for smoking in the bathrooms, and various delays had made this project seem to go at a snail's pace. However, here at the end the results were impressive. They had drawn scale plans of the site, designed raised beds and benches, figured out the lumber order, talked with the groundskeeper, ordered topsoil, constructed three large beds, gotten blisters shoveling in the hot sun,



Their portfolios were

more revealing of

the students and their

abilities than any

percentage average

would ever be.

and made six beautiful benches that could be arranged in a circle for an outdoor classroom. Now they talked to their class about what they had done and what they had learned. The class was interested, asked good questions, and applauded them when they finished. As they put shovels and rakes into their car, we shook hands. They had done something real, something they knew would be an im-

provement to the school with which they had enjoyed a checkered relationship, and they felt themselves to be a part of that community.

Another project was presented by Melissa, a girl who had dropped out of school the year before and was back this year, gusting it out to push herself toward a diploma, having experienced the alternative as not so hot. Intelligent, she had not been successful at writing a summary of what she had been doing for the project. I had pressed her on it, and finally agreed that she could give her

progress report orally, into a tape recorder. Just as in Jade's case, I was doubtful that much had been accomplished to date, as day after day she signed out to the library or AV room. I was heartened when I pushed the button on the recorder. This student, who had spent days writing a few disjointed notes on paper, was speaking with passion and authority on a subject she had obviously researched deeply. Her project was on the oil spill in the Arabian Gulf.

When the day for presentation arrived, she wheeled in a VCR, a record player, some assorted props, and a still video camera. She put Handel's Water Music on the record player, poured oil onto the desk over a pile of feathers and fur, then showed pictures that she had photographed from various sources, using the still video camera that she had learned to operate, despite her distrust and misgivings about technology, and a lack of confidence in her abilities in this area. The class listened carefully, asked many questions, and gave sincere applause and praise to this class member with whom they had not always felt much in common.

The last quarter of the year was largely given over to projects in various forms. As they tumbled in,

some were good, some poor, and many, like these, were memorable. What they all had in common was a refreshing degree of student involvement. One student, accompanied by a friend's guitar, performed five original songs he had composed for representatives of each of the biological kingdoms. Another pair of students had visited the hospital and researched the treatment of premature babies. Others had conducted telephone interviews of day care centers, and built a scale model of their concept of an ideal child's environment.

The Chittenden South school district has addressed the subject of what skills students need in order to be able to learn, and developed a document call Essential Behaviors for Learners (see page 52). These include critical and creative thinking, communication, cooperation, functioning independently, taking risks to succeed, exhibiting self-confidence, creating options and making choices. All over the country, schools and businesses are coming up with similar basic behaviors that are gradually being seen as even more important and essential than the information that schools attempt to impact, with widely varying success.

Champlain Valley Union High School's Science department, in an unusual consensus had agreed on several unilateral actions to pursue these goals, while we waited for the promised revolution of restructuring. Many of us made projects a large part of our classes. As a department, we revived the idea of a project fair after a fifteen-year hiatus. We established simple portfolios, requiring four specified pieces of writing from all students. We also agreed that we would not give standard two-hour final exams that purport to test the retention of content over the last semester. Instead, we each were to come up with different non-traditional ways of assessment based upon performance.

Portfolios

The tide of interest is rising on this concept. In many cases, the logistical requirements alone, not to mention the complicated assessment schemes appear to make this another whole bundle of straws to be loaded onto the backs of teachers already creaking under too many burdens. We were fortunate in deciding to start small, but to start.

On the last two days of regular classes, all of my students were in the computer lab, typing the final piece for their portfolios, a descriptive paper based upon their choice of several topics, ranging from an imagined day in the life at their job in ten years, to a description of the best learning experience of their life. They knew it would not be graded, but every single student was working hard.

I learned more about my students from reading these pieces than I had learned all year. Somehow, almost all had found a topic they cared about, and had produced a sincere response. I wished I had been able to reach that level of communication with them much earlier in the year. When I held their portfolios in hand, consisting of four items each, in a stack of 100 manila folders no more than a foot deep, I had no doubt that of all the reams of paper that we had used over the year, these products were more revealing of the students and their abilities than any percentage average would ever be.

Final Exams

Spend a week of classes reviewing, while the kids try to cram into a week what they hadn't done all year, then subject them all to a two-hour test. I had noticed a phenomenon with lower-achieving classes. It didn't matter how many questions I asked (some previous exams had contained 200 or more multiple choices and several essays), for all intents and purposes. The last hour was a restless one, culminating in a stolid group crush at the door for the last ten minutes, while the seconds separating the students from freedom ticked slowly by.

Now I had permission to do something different, so I decided to base the exam on the Essential Behaviors instead of the content with which I had belabored the reluctant learners, fairly unsuccessfully, I was sure. I made up 8 or 9 activities that were designed to use various essential behaviors. For instance, they were to use their notes on the project presentations to say out loud something they had liked about one of their classmates' projects. To demonstrate cooperation and creativity they were assigned groups and given the task of building three-dimensional models of imaginary animals adapted to unusual environments. Then they presented their creations to the class. They were each

given an obscure biological question they had never studied, and sent to the library to demonstrate that they did, indeed, know how to use this resource.

In my last class I decided to try out a more radical departure, and designed a single activity exam. In this, they were assigned to groups and given the first half hour to research an assigned topic that we had not studied. In the next half hour, each group designed and constructed a game that would teach players about the subject. Following that, the groups taught each other their game, and played a bit of it. Finally, each individual student wrote an evaluation of his or her own participation, the group's effort, and an analysis of the subject and effectiveness of another group's creation. In each class I rediscovered another feature of activity-based learning - it takes time. After two hours we had not completed all of the activities. However, amazingly, the bell rang on a classroom of students who were still working after two hours. They did leave when the bell rang, of course, but not with that depressing artificial joy of prisoners being furloughed. I had exams in hand that would be truly enjoyable to grade.

I do not mean to suggest that every project, portfolio piece, or final exam was successful or justified the time spent. Active learning is not a panacea. These examples, however, gave me several reasons to pursue the goals of restructuring.

They involved creativity. They honored the student's real-life concerns and skills. They addressed the essential behaviors for learners. They were interesting to other students and their teacher. And they reflected skills which would be relevant to every student's future life.

The last part of my Environmental Science exam took place outdoors. The students were spread over a hillside, sitting by themselves for 20 minutes and writing a personal response to the environment which surrounded them. In the last ten minutes, I started to walk around and say goodbye to each student. I shook each student's hand, for the first and perhaps the last time. In some cases I felt that I was making contact at last, better late than never. The barriers between instructor and reluctant learner had started to come down. The students were beginning to become their own teachers.

Ken Martin



The New Haven River Project

An interdisciplinary activity engages students to look within their community to find science applications and produce meaningful information.

or the last two years, seventh and eighth grade students at Mount Abraham in Bristol, Vermont have gone outside their classrooms to study the New Haven River. Their study of benthic organisms, plant communities, chemical parameters, stream gauging, and oral history, integrates many disciplines, makes connections between their classroom experiences and the real world, and gives them a chance to have fun while learning.

Cooperative groups comprised of four to seven students with similar interests work together with

The most important lesson of hands-on, inquiry-based learning is that students are stimulated, excited, and riveted by their own discoveries.

an adult to accomplish a set of research and reporting tasks. Students use writing, reading, science and mathematics skills to investigate community impact on the local environment. They also have opportunities to interact with professionals involved in environmental issues and to have hands-on research experience as they gather, organize and analyze real-life data.

Before field work and sampling begin, students are

introduced to background material. Six working groups are given a major problem and the relevant concepts to address it. Mathematics and Science classes help prepare students through lessons on geography, natural history, and management of the aquatic habitats of Vermont with particular attention given to the New Haven River. Class time is organized for teams to meet, become familiar with their tasks, learn to operate their equipment, and determine the role of each team member. Teams are also given guidelines to include oral, written, and graphic elements as they prepare and present their findings.

When students take to the field, volunteers from the Vermont Agency of Natural Resources and Vermont Natural Resources Council as well as private consultants give additional assistance. Team 1 measures pH, temperature of the air and water, dissolved oxygen, and suspended solids. Team 2 measures the cross section of the river. Team 3 studies invertebrates. Team 4 studies botany and identifies species. Team 5 describes the river canopy, trash dispersal, stream bottom and bank characteristics. Team 6 measures the stream velocity and gradient. Each day Lout 40 students go to two sites to conduct the above activities and then report orally on the day's findings and methods used.

Students demonstrate achievement by participating in field work, contributing to team presentations, and by formulating responses to questions from teachers and peers. Perhaps more important, the value of the project extends to students in other ways. Reluctant learners and those who lack discipline in the classroom are often seen literally up to their knees in the project. Students are made aware of the opportunities for learning in their own backyards. And they are absorbed in periods of complete concentration as they hunt for new aquatic insects or measure the stream cross section. Students develop a proprietary interest in the river. Their group presentations indicate obvious pride in their achievement and their confidence in the body of knowledge they have generated.

Over and over students ask "Can we do this for the rest of the year?" Moreover, the aesthetic value of the river is often mentioned in their writings. Baldwin Creek "was truly breathtaking," "the water seemed to just tumble over the rocks to a silent symphony" writes one student. "It would be a wonderful place to just lay around and watch the day go by" writes another. Many students make recommendations for further studies in the field as well as class activities to precede or follow field work.

Significantly, the benefits of the project extend to faculty too, who are creatively challenged to explore new approaches to teaching and learning. Teachers are brought into close association with community professionals and they gain practical first-hand experience along with their students. Teachers communicate with other faculty members

to gain a better perspective on educational practices within the system.

The whole school benefits because the project infuses an air of excitement and anticipation. Students and teachers from other classes drop by to see what is going on. The daily routine is changed and people look forward to doing something "different."

Beyond these spheres, the community gains too. For example, data gathered through a river use survey is conveyed to Bristol town officials prior to a hearing on the proposed sewage treatment facility being planned for the village. Included in the survey are public perceptions of the river's quality, its recreational use, and opinions on its management.

Experiences in gathering, organizing, and analyzing information are important lessons for the real world. But the most important lesson of handson, inquiry-based learning is that students are stimulated, excited, and riveted by their own discoveries. These important learnings are recognized in Bristol where community volunteers, business people, state officials and educators are successfully managing the New Haven River project as an engaging hands-on science and mathematics project.

Shelly Snyder



Shelly Snyder and Bill Conley discuss inquiry-based learning and performance-based assessments at the Lead Learner conference.



48

The 1992 Senior Class at Cabot School chose the ninth and smallest letter of the Greek alphabet, IOTA, to designate their new senior year experience: Individual Opportunities to Achieve.

mily has been interested in criminal justice for as long as she can remember. To understand our current system better, she researches its history in the United States and then arranges a series of meetings with lawyers, judges, prison wardens, and probation officers. A nearby correctional center becomes the setting for an internship Emily sets up for herself. Through her experience there, she concludes that most pris-

We believe it is essential for students to work with a mentor of their own choosing, to define their own areas of interest, and to become responsible for their own projects and experiences.

oners would not be incarcerated if as children they had enjoyed at least one appropriate role model actively involved in their day-to-day lives. On a trip to New York City sne contacts Big Brothers/Big Sisters of America to find out what is involved in establishing a local chapter. After returning to Vermont, Emily recruits friends and neighbors to help with her cause. Soon she is spending free afternoons and weekends with a needy child in town, her new "little sister". Proud of ner ability to affect positive change in the world Emily

makes public the results of a year's work.

Who is Emily, anyway? A psychology major? A candidate for a Masters in Social Work? A retiree seeking meaningful volunteer work? Actually, Emily is a model of a typical high school senior in the redesigned final year at Cabot School. Our new approach is titled the IOTA program, which stands for Individual Opportunities To Achieve.

Why a new approach? At Cabot we have come to believe that after twelve years in the same general mold, seniors the damajor change in environment, requirements, and resources. Both intellectually and emotionally, they are ready to pursue new challenges. Too often the senior year is seen as a time to coast, to take an easy course load, or to

become content with simply being bored. We plan to rid our school of the senior-itis virus, and IOTA is our antidote.

This summer a group of professionals from the School worked with incoming seniors and their parents to determine what the IOTA design would include. By the end of August, we felt confident that we had a strong framework for September, one that would afford seniors choice, challenge, and change. In the morning seniors will attend core academic classes. The afternoon will be reserved for IOTA activities, the first of which is a required course called Senior Synthesis. Tailored to meet the needs of individual students, this class will emphasize critical thinking, problem solving, and life skills as seniors attempt to identify more clearly who they are and who they want to become. The remainder of the afternoon will be scheduled by th. students themselves, keeping in mind the many objectives of IOTA. Community service requirements, obligations to shadow workers and professionals, and a substantial internship must all be completed, along with the research and writing of a major thesis and the development of a directly related experimental project.

IOTA will clearly involve many other elements; skills in oral and written communication, time management and strategic planning will be essential. Also included are activities to promote arts appreciation, peer teaching, and understanding of diverse cultures as students work to arrange and experience a cultural exchange with an urban school.

The most significant aspect of the IOTA program is the individualization involved. We aim to encourage seniors to become more independent and to accept and embrace ultimate accountability for the success of their own learning.

We can hardly wait to begin. We are looking forward to making Emily's experience the norm for all students. And we hope that Individual Opportunities to Achieve will not only become a culminating celebration of students' high school careers, but that it will also facilitate their passage to new and more independent lives.

Julia Hewett & David Book



Update on Restructuring at Otter Valley

estructuring at Otter Valley has mercifully reached a stage where people can roll up their sleeves and do some concrete work. After a year of sometimes tedious and occasionally rancorous debate the mission statement has been translated into a list of definite goals. A five year plan for restructuring has been developed under the leadership of the steering committee and target projects have been set for each of the four goals.

The leadership of the school still lies in the capable hands of the troika. Having three teachers fill in for the traditional principal has been approved for at least one more year. At this point the same three faculty members will serve as administrators. There has been talk of setting up the positions on a rotating basis so that the classroom experience never becomes too distant a memory.

The year was punctuated by one disaster. A one week thematic unit had been planned for the spring. This was to be a practice exercise in school-wide planning, cross curricula and across grade level activities. As we proceeded to select a topic it turned out that, through an unforeseen design flaw, a minority of the school members selected the main theme. This led to a particularly acrimonious debate on how to remedy the situation and eventually the project was dropped.

As restructuring begins to take a recognizable form it is starting to resemble a trident. The three prongs are represented by heterogeneous grouping, interdisciplinary activities and schedule modifications that will allow for the first two to occur.

This summer 15 teachers participated in a course taught by Roger Genest of Pioneer Valley Regional High School on effective ways of teaching in the heterogeneous classroom. During this class teachers were to develop six to eight weeks of plans for the coming year.

The eighth grade has been heterogeneously grouped and two teams of eighth grade teachers have been organized and given common planning times to provide the same type of family structure that has been so successful with the seventh grade for years. The teams will focus on individual students' needs and abilities. A pilot team (or teams) for grades nine and ten is in the works for next year.

Interdisciplinary work got a lot of attention this summer as well. Thirty-two teachers, about 50 percent of the staff, are engaged in developing interdisciplinary projects. These projects were funded by grants and are in keeping with our philosophy that time and money must be made available if the proposed revisions are to become realized. Some projects are designed to work across grade levels as well as across content areas and all departments are involved, including the industrial arts. In addition,

the Science department is working to develop a spiral curriculum of its own. This is an attempt to break down the artificially imposed boundaries between the individual sciences that developed from the traditional layered approach. One teacher and one guidance counselor served as Lead Learners at the Governor's Institutes in 1991. They participated in a variety of experiments and experiences involving more diagnostic and humane methods for evaluating student progress and program effectiveness.

Restructuring is starting to resemble a trident: heterogeneous grouping, interdisciplinary activities and schedule modifications that will allow for the first two to occur.

A second School Development Institute was held with the dual focus of community outreach and action research. The goal was to provide a continuing evaluation process for restructuring and to ensure that the entire community continued to be involved in the process. Several community forums have been held and were well received. The action research is to provide documentation that the changes are effective. To the extent that they are, it is hoped that more schools will follow in the restructuring process and we will have data that they can use as guidelines.

The structure of the steering committee has been formalized and now includes rotating members. The board is faculty-based and has the unenvied task of coordinating the octopus of arms that comprise the restructuring effort.

It has been a busy year and there is a sense of anticipation as the hard work takes effect and our school begins to assume a new and healthier look.

Bruce Douglas



Restructuring Special Services in the Cabot Middle School

50

Team teaching and coordination, heterogeneous and militiage grouping, peer tutoring, student-centered activities, cooperative learning strategies, interdisciplinary thematic units, attention to multiple intelligences, and diverse learning styles have become, in varying degrees, regular occurrences in the Cabot Middle School. But the full impact of integrating the 'Learning Center Team' has yet to be felt.

level students, it is imperative that students with special needs have full access to the regular, mainstream activities and environment. In addition, it is a well-known fact that all children between the ages of ten and fourteen, typically described as "inherently, developmentally at-nsk",

The special services improvement plan calls for the Learning Center Team to begin to offer a study skills course to all middle level students.

have special physical, intellectual, emotional, and social needs during this perior' significant developmental change. The Cabot Middle School plans to help these youngsters thrive during their transition through early adolescence by extending the school's Learning Center Team's services to conform naturally and meaningfully within the context of the whole Middle School program. Until the end of the

1990-1991 school year at the Cabot Middle School, two printary teams formed the program: the Core Learning Team and the Arts Team. During the year the new Learning Center Team, formed from special services staff, continued to provide services distinctly "as needed" on an individual case basis. Although the Center's staff broadened its classroom, by teaming with teachers on unit projects, and by team teaching a Mathematics class, and although these innovations made the Learning Center teachers more visible and available to more students than in previous years, the full thrust of this team's integration has not yet been felt. A new plan for improvement of Middle School special services begins to address the issue.

Goals and Objectives

For the past two years, as a part of our restructuring initiative, our Middle School developed a study ski'ls program for the purpose of supporting students' academic studies. The special services improvement plan calls for the Learning Center Team to begin to offer a study skills course to all middle level students. By doing so, "special" study halls, which historically served only a select number of Special Education or Chapter One-eligible students, can be eliminated, even as improved support services for all students are provided.

The Study Skills class will serve as a manager of school affairs by assisting students in their ability to express, discuss, and coordinate the various factors and situations influencing and comprising their lives. The course will teach basic study skills and reinforce higher order learning skills to help students achieve success in other classes, as well as foster their desire to learn both in and out of school. It will prepare them for future learning experiences. Students will be given time and opportunities to explore new ideas by applying their knowledge and skills to solve problems, to develop conscious control of their thinking and action, and to take responsibility for their own learning. Study Skills class will become the students' link between the development of self-concept and academic performance by helping them learn how to learn.

The Study Skills program goals are:

- To meet the need of Cabot's diverse student population so that each student will achieve success in the regular classroom by helping every student utilize his or her strengths to cultivate skills in areas of weakness and develop a positive self-concept.
- To support the psychological and academic growth of Cabot's young adolescents by providing opportunities for students to share and synthesize what they are learning and how they are feeling.
- To ensure that every student becomes an independent, lifelong learner by helping each one



achieve a repertoire of learning strategies, communication skills, and organizational competencies.

Collaboration

The Learning Center Team will become an integral part of the Middle School program by working in concert with the Core Learning and Arts Teams. Program decisions will continue to be made with parental input, and parent discussion groups will be ongoing in order to communicate information about the curriculum, homework, and the social and developmental needs of students. Furthermore, the Study Skills classes will be team taught by the Learning Center staff, to facilitate cooperative learning groups and peer tutoring activities, to interact personally in one-to-one settings with students, and to involve students in technology education.

We plan to collaborate with students within a learning environment that is supportive of their developmental needs, and consequently expect to face unforeseen learning circumstances and problems, a risk we are motivated to take. With the active interest and supervision of our principal, assistance provided by our guidance counselor, and weekly middle level team meetings, we expect to engage in a continual process of modifying and adjusting lesson plans. We feel confident that new collaboration among the Core Learning, Arts, and Learning Center Teams will result in a program that is responsive to students and contributes to their success.

Implementation

The Study Skills course will take place during the fifth period every day, and will accommodate all seventh and eighth grade students on an alternating schedule. The subject of each lesson will be directly correlated to their content area studies, and teacher teams will meet regularly, possibly daily, to ensure relevance of skills and academic congruence.

An outline of the course curriculum will be presented to the Coordinator of Special Services. We will have to demonstrate how services for Spe-

cial Education and Chapter One students are being delivered and how their individual program objectives are being met in the regular education environment. The Coordinator will advise us and be able to offer suggestions in that regard, and will be a consistent resource for the Learning Center Team.

Assessment

We plan to perform the following assessments to evaluate the improvement plan:

- Individual pre/post videotaped interviews with students reflecting their attitudes and intellectual growth.
- Quarterly surveys of parents' reactions and responses to the impact or benefits of the Study Skills course.
- Faculty and administrative feedback, ongoing throughout the year.
- · Midterm and quarterly report card grades.
- Measurement of gains and objectives mastered according to the individual plans of special needs students.

Carlene Bellamy



Leaders All:

Champlain Valley Sets No Limits on Numbers

Recently, the editorial page of the Burlington Free Press ran an article on the subject of leading for change that featured our school's principal, Val Gardner, and several of our teaching colleagues.

The article defines leadership as "the ability to envision high goals and inspire people to strive toward them." A noteworthy thing about this definition is har does not limit the number of leadership roles available.

"One leader is not

going to change our

school," principal

Gardener was quoted

as saying. "You need

the cooperation of

many people."

• • • • •

"One leader is not going to change our school," principal Garner was quoted as saying. "You need the cooperation of many people. The hard part is figuring out the rate of change, so that you don't panic people but engage them."

Fundamental school change is a powerful topic that reaches outside the traditional establishment. If schools are going to change dramatically from the ones most Americans know, the public wants some input. Teachers have a pow-

erful interest, too. This means that educational leadership cannot follow an old "boss-management" system.

We realize that change is not happening quickly in our school district, but it is happening well. A powerful consensus is taking shape, largely because every effort has been made to include all segments of the school in the process. The first step was defining the school's mission. In 1987, a coliaborative group of faculty, administrators, and students, with the support of the school board, was invited to write a mission statement. Articulating a basic agreement shared by all members of the school community was considered essential. Since then, through the development of two important documents, Essential Behaviors for Learners and Webs of Knowledge, we have focused on defining what essential skills and knowledge all students need.

A coordinating group known as the Futures Committee was established to explore change, using these resources as a foundation. These dedicated teachers and administrators meet monthly or bimonthly to discuss changes and new programs.

Recently our principal raised the ante by declaring that the groundwork is laid, the time to change is now. The Futures Committee prepared a "Call to Action" for proposals for a new freshman program and all faculty members were invited to submit their plans.

Numerous proposals were submitted and discussed in a meeting attended by two-thirds of our faculty. The five-hour gathering was said by many to have been one of the most positive and thought provoking events ever held by our disparate faculty and administration. Now, for once, there is enthusiasm for scheduling new meetings because there is a feeling of movement.

Many restructuring programs have been established more quickly, sometimes overnight, by executive hat. Ours has been years in development and is not yet a reality. However, attention to groundwork, detail, and involvement has given confidence and direction. A concept of shared leadership has resulted in active, dynamic involvement by a majority of our school community.

Glenn Fay, Jr. & Ken Martin

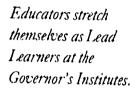
Reprinted with permission from the authors and The Regional Laboratory in Andover, Massachusetts.

Essential Learning Behaviors

Effective learners:

- mink creatively and critically
- communicate
- cooperate with others
- function independently
- take risks to succeed
- exhibit self-confidence
- create options and make choices

From Essential Behaviors for Learners document produced by Chittenden South Supervisory District 1989





BEST COPY AVAILABLE



ABOUT THE LEAD LEARNERS AND AUTHORS

Ken Bergstrom is an adjunct faculty of Education at Saint Michael's College and a doctoral student at the University of Vermont. He helped develop the Standards Board for Professional Educators during its first two years of operation.

13 wid Book teachers Social Studies to students in grades 9-12 at Cabot School and attended are 1990 Institute on International Affairs as a Lead Learner.

Peter Carini teaches Science at Rutland and attended the Science Institute.

Bill Coulcy teaches multicultural awareness and training courses at the School for International Training in Brattleboro. He is a planning consultant and staff member of the Lead Learner and First Network projects.

Maurcen Cunningham is a guidance counselor for grades 9-12 at Otter Valley Union High School in Brandon. She attended the Arts Institute.

Kenneth Delorge teaches a 9th grade course in Comparative Cultures and 11th grade and Honors level U.S. History courses at Champlain Valley Union High School in Hinesburg. He also served on the school's mission statement commission. He attended the International Affairs Institute.

Bruce Douglas who attended the Science Institute, teaches lab Biology for combined 9th and 10th grades, and non-lab courses in Biology and Physical Science at Otter Valley Union High School in Brandon. He also serves as chairman of the district Science curriculum committee and on the committee for interdisciplinary studies at Otter Valley.

Glenn Fay, Jr. teaches Science at Champlain Valley Union High School.

David Gibson is the Executive Director of the Governor's Institutes of Vermont and a consultant to education working on professional development systems in Vermont. He lives and works in Stowe, where he plans and manages the three student Institutes in Arts, Science, International Affairs, and the Lead Learner program. He also codirects the First Network.

Steven Gross is Chief of Curriculum and Instruction for the Vermont Department of Education and Director of The China Project at the University of Vermont. He is guiding the state's work on The Common Core, among other projects.

Patty Heather-I ca teaches grades 9-12 Mathematics at Champlain Valley Union High School in Hinesburg. She was a Lead Learner in the first year of the program in 1990.

Julia Hewitt teaches courses in English for grades 10-12 and recently designed, with three other educators whose specialties are in Social Studies, Art, and Music, a 9th grade Humanities course at Cabot School in Cabot. She attended the Arts Institute.



Geof Hewitt serves as the Writing and Secondary English Consultant to the Vermont Department of Education. He is a planning consultant and staff member of the Lead Learner Program and a resident writer at the Arts Institute.

Susan Kuntz is Director of the Graduate School of Education at Saint Michael's College in Colchester and serves as the Chair of the Standards Board for Professional Educators.

Elizabeth Lasser is an organizational consultant and staff assistant to the Governor's Institutes of Vermont who lives and works in Stowe.

Thomas Learmouth teaches Geography, and Study and Social Skills courses to 7th and 8th grade students at Mount Abraham Union High School in Bristol where he is also helping create a multiteam, integrated-study Middle School. He attended the International Affairs Institute.

Jim Lombardo is Superintendent of Schools for the Addison Northeast Supervisory Union in Bristol, and is a project codirector of the First Network.

David Marshak is the Curriculum Coordinator for the Addison Northeast Supervisory Union in Bristol, and is a project codirector of the First Network.

Ken Martin teaches Biology and Environmental Science at Champlain Valley Union High School in Hinesburg where he has also served on the Future and Inservice Groups, and founded the school's Art Club. He attended the Science Institute in 1990 and this year attended the Arts Institute.

Helen Morrison joined the staff of the Lead Learner program this year after her 1990 Science Institute participation. She brought to the staff the perspective of a teacher who had implemented ideas — The Nichols Pond Project — based on her first year's experience. She attended the Science Institute again in 1991.

Margaret Snelgrove is an Enrichment Project Coordinator and Language Arts teacher in grades 9 and 10 at Mount Abraham Union High School. She also represents the school on the district assessment committee. She attended the International Affairs Institute.

Shelly Snyder teaches 7th grade Mathematics at Mr. Abraham Union High School, where she also runs the New Haven River Project. She attended the Science Institute.

Carol Sweeney teaches a range of Economics, Accounting, Word Processing, and Computer Applications to students in grades 7-12 at the Cabot School in Cabot. She attended the pre-Institute conference on Performance-Based Learning at Johnson State College.

Richard Tulikingas directs the Challenge Grant School project of the Vermont Department of Education.



LEADING & LEARNING

is published by the Governor's Institutes of Vermont

Compiled and edited by

Geof Hewitt, Vermont Department of Education
David Gibson, The Governor's Institutes of Vermont
Elizabeth Lasser, The Governor's Institutes of Vermont

Directed and supported by

The Board of Trustees of the Governor's Institutes of Vermont

Patricia A. Barr Bennington Sandra Cohen Rutland Terry Ehrich, Secretary Bennington Susan Farrow Rutland Robert Gannett Brattleboro Chris Hadsel, Treasurer Burlington Timothy Hayward, Vice Chairman Montpelier Sue Kardas Arlington Harry Miller Brookfield Nancy Port Montpelier Bonnie Reid Martin, Chairman Essex Alexander J. Shak Randolph Katharine White Derby Line





100 Notch Brook Road, Stowe, Vermont 05672 (802)253-9588

